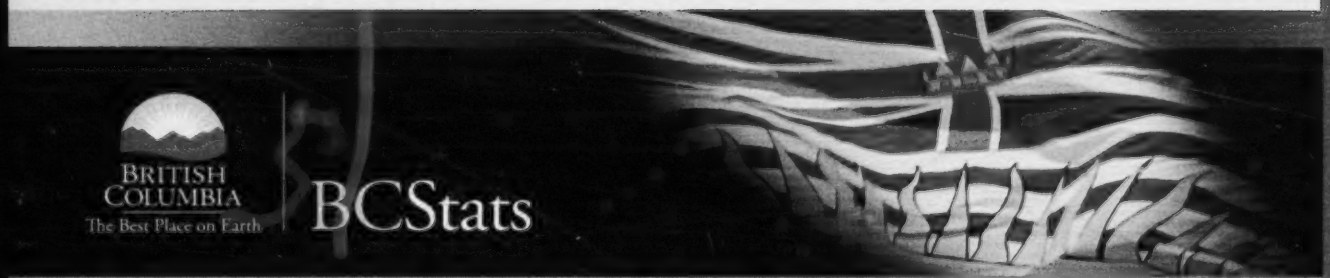
PROFILE OF THE BRITISH COLUMBIA HIGH TECHNOLOGY SECTOR

2008 EDITION

Prepared for the Ministry of Technology, Trade and Economic Development and the Ministry of Advanced Education and Labour Market Development



BRITISH COLUMBIA
The Best Place on Earth

BCStats

Profile of the British Columbia High Technology Sector

2008 Edition

A joint project of:

BC Stats,

Ministry of Technology, Trade and Economic Development

and

Ministry of Advanced Education and Labour Market Development

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BRITISH COLUMBIA

The Best Place on Earth

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Executive Summary

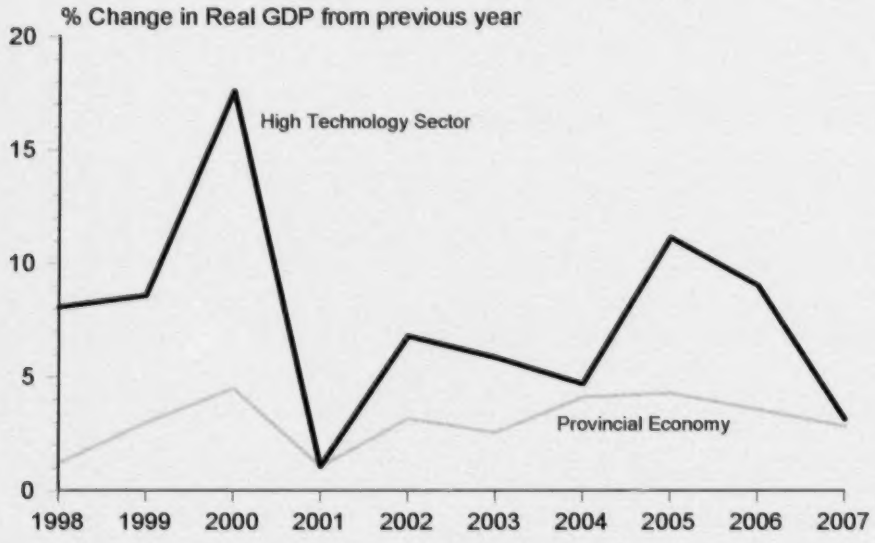
British Columbia's high technology sector is still relatively small, but it is growing and has gained a foothold in the provincial economy. The province is now home to some high tech clusters in areas such as digital media, biotechnology and "green" technologies that are world-class and, in some cases, world leaders.

BC's high technology sector expanded in 2007

British Columbia's high technology sector continued to expand in 2007, with strong growth in employment and revenue and more modest growth in exports and GDP. The growth from 2006 to 2007 exceeded that of the overall industrial aggregate for several indicators, including GDP, employment, wages and exports.

Growth in high technology GDP slowed in 2007, but still climbed 3.1% to $9.3 billion. All the growth was in the service sector as GDP for high tech manufacturing actually dropped 1.7%, while GDP for services jumped 3.8%. British Columbia's high technology sector has consistently outperformed the economy as a whole over the last decade and the same was true in 2007 as BC's aggregate GDP rose only 2.8% compared to the 3.1% posted by the high tech sector. High technology accounted for approximately 5.9% of British Columbia's overall economic output in 2007.

BC's high tech sector has consistently outperformed the overall economy



High technology revenues in British Columbia climbed 8.4% in 2007, to $18.1 billion. This marked the sixth consecutive year that

high tech revenues have experienced strong growth. All the gains were in the service sector, as revenues from high tech manufacturing industries actually declined 4.3%. Services, which are the source of the bulk of revenues in BC's high technology sector, boosted revenues by 10.8%.

In spite of the challenge of recruiting new staff in British Columbia's tight labour market, the province's high technology sector continued to experience employment growth, adding 3,700 net new jobs in 2007, an increase of 4.8% from 2006. The service sector led the way, adding approximately 3,570 net new jobs, an increase of 5.7% over 2006. Employment in high tech manufacturing industries was also higher, edging up 0.9%. There were more people working in high tech jobs in BC in 2007 than there were working in the forest sector and mining, oil and gas extraction industries combined.

The increase in employment resulted in growth in wages and salaries as well. British Columbia's high technology sector paid out almost $4.7 billion in wages and salaries to its employees in 2007, a 6.9% increase over the compensation paid a year earlier. At $1,100, average weekly earnings in the high tech sector are far higher than the overall BC average weekly wage rate of $760.

Despite the jump in employment, the number of high technology establishments in BC (excluding those with no employees) actually fell in 2007, dropping 6.9% to 8,573. Approximately 91% of these establishments were in service sector industries. There were also 15,633 establishments with no employee payroll (which can be seen as a proxy for the number of self-employed people with no paid help) in the high technology sector, bringing the total number of high tech establishments to 24,206 in 2007.

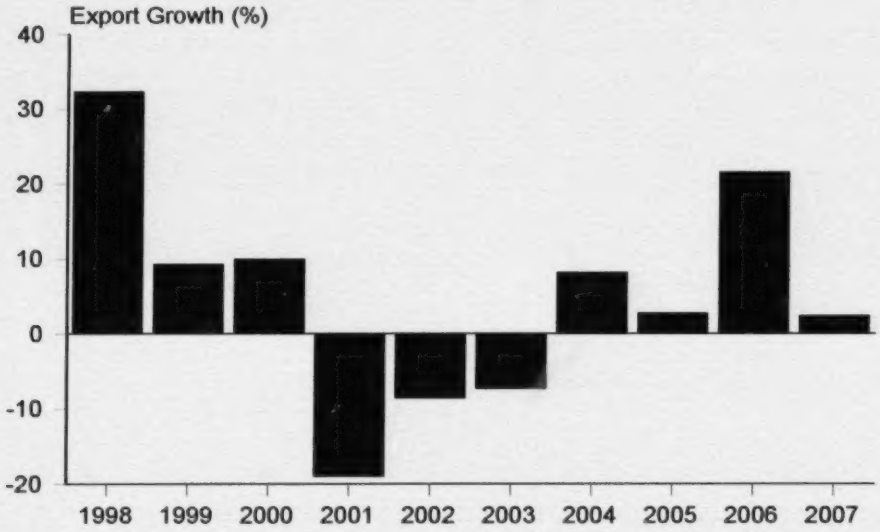
Exports and imports of high tech goods increased in 2007

International trade is an important aspect of the high technology sector, as reflected in the high volume of two-way trade. The domestic market for high technology goods does not have sufficient volume to achieve the economies of scale needed to remain competitive and in some cases, BC manufacturers do not produce enough of some types of goods to satisfy domestic demand. As such, both exports and imports play an important role in BC's high tech sector.

Despite being faced with the challenge of the Canadian dollar reaching par with its American counterpart, British Columbia exporters of high technology goods managed to boost the value of their shipments to international destinations up 2.4% in 2007, to

$877.1 million. While exports to BC's largest market, the United States, edged up 2.7% in 2007, the strongest growth was in shipments to the European Union, which increased 19.5%. A large portion of this growth was from a 178.8% jump in exports to Germany. However, exports to the United Kingdom (+13.3%) and the Netherlands (+35.9%) also experienced strong growth. Shipments to the Pacific Rim plunged 20.2% in 2007, with many of the top Asian destinations experiencing double-digit declines. Australia bucked the trend, as exports to that country jumped 23.3%.

BC high technology exports edged up in 2007



The value of high technology goods imported into British Columbia increased for the fourth consecutive year in 2007, rising 10.8% to almost $4.7 billion. After six straight years of declines, imports from the United States finally turned around, recording an increase of 8.1%. Mainland China continued to be a growing source for high tech products imported into British Columbia, with shipments climbing 14.2%.

British Columbia imports substantially more high technology goods than it exports and, as a result, the province runs a trade deficit in these commodities. The deficit climbed to almost $3.5 billion in 2007, as growth in imports outpaced that of exports.

Computers and telecommunications products dominate both exports from and imports to British Columbia, with aerospace goods and life sciences products (which are mainly comprised of medical equipment) the next two most important commodity groups.

The United States is by far the most significant destination for BC high tech commodity exports with 69% of the goods shipped there

in 2007. By comparison, only 15% of BC's high tech goods were shipped to the European Union and a further 9% to Pacific Rim countries. In terms of imports, the US is the top source, with 34% of BC's high tech commodity imports originating in the United States. However, the countries of the Pacific Rim together were the source of 40% of BC's imports, with half of those coming from Mainland China.

As important as trade in goods is to BC's high tech sector, it is still small compared to trade in services. In 2007, the value of high tech service exports was three times that of international shipments of high tech goods. The value of high tech service exports from BC edged up 1.5% in 2007, despite a 43.6% drop in exports from the motion picture production and post-production industry.

BC ranks fourth in the country in most measures of high tech

Compared with the rest of Canada, British Columbia's high technology sector ranked fourth in most measures of high technology, including GDP, revenue, employment and value of international exports. The province has a much smaller high tech sector than the majority of states in the US as well, with high technology making up a far smaller share of employment and GDP compared to most states.

Nevertheless, the sector has been growing and is becoming a more integral part of the provincial economy, employing more people than BC's traditional economic powerhouses, the forestry and mining industries. While the sector as a whole may not rank prominently compared to other high tech jurisdictions, BC is home to some high tech clusters, such as fuel cells and motion picture production, that are world class and, in some cases, world leaders. Given high tech's penetration of all aspects of society, it is likely that BC's tech sector will continue to prosper and evolve.

Introduction

The BC high technology sector

As a source of innovation and a supplier of high paying employment, the high technology sector is an important segment of the economy. High technology has come to play a significant role in the economy of British Columbia and the province is now home to some high tech clusters in areas such as digital media, biotechnology and fuel cell technologies. Companies such as Electronic Arts, Angiotech Pharmaceuticals and Ballard Power Systems are just a few of the many world class companies in these areas. In addition, British Columbia is developing a wireless technology cluster, as evidenced by the fact that three Vancouver-area companies were listed among the 50 fastest growing wireless companies in North America.[1] There were 13 Canadian companies in the list and the three Vancouver companies were the only ones outside of Ontario. Other areas that offer potential for growth in British Columbia include alternative energy and environmental technologies.

The study of high technology

The impact that technology has had on the economic and social landscape underlines the importance of the role of technology in the economy as an area of study. The *Profile of the High Technology Sector* is part of an ongoing project to monitor the growth and evolution of the high technology sector in British Columbia by evaluating the economic contribution of firms in the province that produce high technology goods and services. The key indicators examined include gross domestic product, revenue, employment, wages and salaries, establishment counts and international trade.

The designation of a high technology sector among the other industrial sectors of the economy provides a very useful analytic tool. This is based on the premise that high technology firms behave in a way that allows them to be understood as a group, and that programs or policies can be tailored to their needs.

Defining high technology

High technology is usually associated with growth and development. Since research and development (R&D) is the basis for technological advancement, those industries that perform a significant amount of R&D often have a considerable high tech component.

[1] "Deloitte Partners With CTIA to Announce First-Ever Wireless Fast 50 Rankings," published Oct. 23, 2007, retrieved from www.deloitte.com.

However, an industry does not necessarily need to have a high degree of R&D involvement to be considered high tech. Industries that produce goods or services that are uniformly recognized as high tech are also included in the high technology sector. The concept of the high technology sector used in this report is basically product-based; therefore, some manufacturers that employ advanced processes are not included. In other words, just because a good is produced using advanced processes does not automatically make it a high tech product. For example, a mushroom produced in a high tech greenhouse is still just a mushroom.

Since the concept of high technology is constantly changing, it is difficult to define. Nevertheless, there are many different definitions of high technology in use around the world. The *Profile* report uses two different definitions—one that is industry-based and another that is commodity-based—to measure, respectively, high tech's contribution to the British Columbia economy and the volume of international trade in high technology goods.

High technology is described using two different definitions – one that is industry-based and another that is commodity-based

Since the inception of the *Profile* reports in 1996, statistics on the high technology sector have been built up using information from industries within the sector. A more accurate approach would be to identify the firms felt to comprise the sector, then conduct surveys to obtain the information needed to conduct the desired analyses; however, the cost of such an approach would be substantial. Data by standard industries defined under the North American Industry Classification System (NAICS)[2] is largely available from Statistics Canada, which makes an industry-based approach not only significantly less costly, but also offers consistency with other Statistics Canada data, as well as comparative data for other provinces and the United States and a reasonable degree of accuracy.

It should be noted that the high technology definition used by BC Stats is a British Columbia-focused classification and that some high technology industries that are not present in British Columbia, but may be prevalent elsewhere, may be excluded from the data presented in this report. Conversely, some industries that have a substantial high tech component in British Columbia and are therefore included in the high technology sector may be mainly low tech in other regions. For example, the

The BC Stats definition of high technology is British Columbia-focused

[2] NAICS is a system of classifying industries developed in cooperation between Statistics Canada, the United States Office of Management and Budget and the Instituto Nacional de Estadística, Geografía e Informática of Mexico.

fuel cell industry is included in the NAICS classification 335990 (all other electrical equipment and component manufacturing), which is generally not considered a high technology industry, but with the fuel cell cluster in BC it makes sense to include it in the high tech sector.

The industry-based definition includes manufacturers of pharmaceuticals and other chemicals, computers and other electronic products, aerospace products and parts, and medical equipment and supplies. Also included are service industries such as engineering, computer services, motion picture and video production, surveying and mapping, scientific and technical consulting, telecommunications, and research and development.

For more discussion on the industry-based definition, including a complete listing of the industries included in BC Stats' high technology definition, see Appendix A, "Defining the High Technology Sector."

While an industry-based definition makes sense when examining high technology GDP or employment, it is not really appropriate for looking at trends in high tech commodity exports and imports. For this purpose, a second, commodity-based, definition was developed. This definition was constructed using harmonized system codes, which are the commodity classification codes used in Canadian customs documents. The list of commodities to be classified as high technology was based on the US Bureau of the Census' advanced technology products (ATP) list, which has been established for quite some time and is a recognized definition of high technology goods. Since Canadian and American commodity codes are identical only at the six-digit level and Canadian export codes are eight digits and import codes are ten digits, it was necessary to do some conversion. As a result, the final definition may not be completely identical to that used in the United States; however, it should be reasonably similar such that broad comparisons can be made.

For more detail on the commodity-based definition and a brief description of the ATP categories, see Appendix B, "Defining High Technology Commodities."

New to this year's edition

This report includes the latest information available as of August 2008. All data in this paper refer to the calendar year 2007. It should be noted that the data included in these annual reports contain revisions, such that data for previous years that have been published

in earlier reports may be different from those contained in this report.

With this edition, the software publishing industry has been split out from computer and related services where possible (it could not be reported separately in the GDP figures) and three new tables have been added, providing more detail on American international trade in high technology goods. Trade data by state are not available; however, information on employment, wages, GDP and revenue are provided with detail by state. In these tables, data are provided for the top 20 states based on employment. The order of the states in each of the data tables is kept consistent for easier comparison and is based on the size of the high technology workforce. Note that data for GDP and revenue by industry for the United States are not yet available for 2007 with the detail needed to estimate the high tech sector. Estimates were prepared for the United States as a whole, but no attempt was made to estimate GDP and revenue by state.

Readers should note that graphs and text in this publication deal only with the highlights of the information that has been collected. The data tables in the final sections contain additional detail that can prove valuable.

Input Indicators of the BC High Technology Sector

This *Profile* report provides a basic overview of the outputs of the high technology sector in British Columbia; however, it is also useful to look at the inputs to the high technology sector. To this end, BC Stats produces a companion report: *Input Indicators of the BC High Technology Sector*. The high technology sector and the infrastructure network that surrounds it is a complex system with many players and interactions. The *Indicators* report provides measures of the inputs to the high technology sector and the overall climate of innovation. It covers a variety of activities with respect to high technology in the educational, business, government, external and labour sectors. Whenever possible, the indicators are presented in comparison to other provinces, which serve as benchmarks for the situation in British Columbia.

Profile and Trends

High technology sector continues to expand in BC

British Columbia's high technology sector continued to expand in 2007, with strong growth in employment and revenue and more modest growth in exports and GDP. The growth from 2006 to 2007 exceeded that of the overall industrial aggregate for several indicators, including GDP, employment, wages and exports. While British Columbia's high technology sector is still relatively small compared to many nearby jurisdictions, it continues to expand and has become an important element of the provincial economy.

Gross Domestic Product

High tech sector GDP continues to grow in 2007

Growth in high technology **gross domestic product** (GDP) slowed in 2007, but still climbed 3.1% to $9.3 billion.[3] All the growth was in the service sector as GDP for high tech manufacturing actually dropped 1.7%, while GDP for services jumped 3.8%.[4]

BC's high tech GDP grew 3.1% in 2007 to $9.3 billion

Gross domestic product (GDP) is a measure of value added, which is essentially the difference between the cost of the material inputs and purchased services used in production and the price at which a good or service is sold. GDP can be reported using either current or constant dollars. Constant dollar, or real, GDP is the best measure for understanding and illustrating trends over time. Constant dollar figures have been adjusted to remove the effect of price changes (i.e., inflation and deflation) over time. This means that constant dollar values can be viewed as measures of the actual value added, or net output, of an industry.

[3] All GDP figures quoted in this paper are in 2002 constant dollars unless otherwise stated. Note that the GDP figures were rebased from 1997 dollars and this change, combined with data and methodological revisions, has resulted in significant changes to the growth rates for constant dollar GDP.

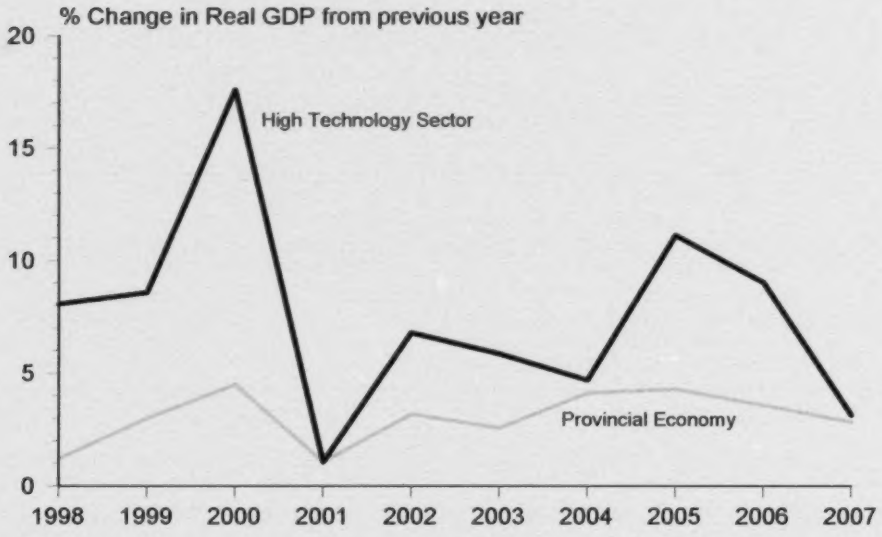
[4] Throughout this report, there are two types of industries examined: service and manufacturing industries. High tech service industries—computer design, engineering, telecommunications, film and video production and information services—do not make a tangible good. Instead they provide expertise, such as software creation, information technology system management, the planning and design of a bridge, or the analysis of a blood sample for medical diagnosis. Manufacturing industries are those that take raw materials, or the products made by other manufacturing industries, and make new products. High technology firms include those involved in manufacturing of aircraft, computer and related products and pharmaceutical goods, just to name a few. While companies often engage in a variety of activities that may include both a manufacturing and a service component, they are classified as either a goods or service-producing industry based on the activity that is their main source of revenue.

The only service industry to experience a decline in GDP was "other services," which includes surveying and mapping, environmental and technical consulting, and research and development. GDP for this industry fell 4.0%. The strongest growth was for engineering, at 7.8%.

British Columbia's high technology sector has consistently outperformed the economy as a whole over the last decade. With the exception of 2001, when high tech was suffering the effects of the dot com crash, high technology GDP in BC has been higher than the overall aggregate GDP in every year. Even in 2001, the growth was on par with the overall economy. In 2007, the 3.1% GDP growth for the high tech sector was slightly higher than overall GDP, which rose 2.8%.

Figure 1

BC's high tech sector has consistently outperformed the overall economy



Compared to high technology in some other provinces and states in the US, the sector in BC is still relatively small. Nevertheless, high tech plays a significant role in BC's economy, generating approximately 5.9% of the province's GDP in 2007, putting it in the same ballpark as industries such as public administration and educational services.[5] The financial, insurance and real estate and leasing sector (including owner-occupied dwellings) generates the greatest contribution, at approximately 22% of GDP.

High tech comprises about 5.9% of British Columbia's GDP

[5] This percentage is calculated using current dollar GDP estimates, since the constant dollar value of the BC industrial aggregate is chained and chained data is not additive, therefore the percentage can not be properly calculated.

Services constitute the bulk of high tech GDP in BC

High technology service sector industries generated about $8.2 billion in output in 2007, or about 88% of the province's high tech GDP. This compares to only $1.1 billion derived from high tech manufacturing industries. Output from the telecommunications industries alone was almost triple that of the manufacturing sector.

BC GDP, 2007
(constant 2002 dollars)

	$million	% change
Manufacturing	1,129	-1.7
Services	8,180	3.8
High Tech Total	**9,319**	**3.1**
BC Total	**150,442**	**2.8**

While it is useful to examine the high technology industry's performance relative to other industries within British Columbia and to look at trends and compare the industry's performance today to what it was a year ago or a decade earlier, one cannot really judge the size and scope of BC's high tech sector without comparing it to high tech in other jurisdictions.

When it comes to high technology in Canada, there are four provinces that have significant sectors that stand above the rest: Ontario, Quebec, Alberta and British Columbia. For most of the economic indicators, British Columbia's high tech sector ranks fourth among those provinces.

BC ranks fourth in the country in high technology GDP

The bulk of Canada's high technology sector resides in Central Canada. Ontario's high tech sector generated $37.4 billion in GDP in 2007, which was almost 44% of the Canadian total. Quebec ranked second with $21.7 billion in high tech GDP, followed by Alberta with $10.5 billion. British Columbia's $9.3 billion GDP for the high tech sector ranked it fourth in the country. The output from BC's high tech sector comprised around 11% of total Canadian high tech GDP in 2007.

BC ranks fourth in Canada in terms of GDP generated by high tech

The service sector generated about 73% of the Canadian high tech sector's GDP in 2007. Of the four high tech provinces, only Quebec (57%) had a lower share of high tech GDP generated by the service sector than the national average. The large aerospace industry and significant production of pharmaceuticals are the main reasons that Quebec's high tech sector has a larger manufacturing sector than the rest of the country. In Ontario, service sector industries pro-

duced 74% of that province's high tech GDP, just slightly higher than the national ratio. Meanwhile, the service sector in both British Columbia (88%) and Alberta (90%) generated a much larger portion of high tech GDP compared to elsewhere in the country.

GDP growth for high technology was modest across the country. Nationally, high tech GDP climbed 2.4%. Alberta's 3.6% change in high tech GDP led the way, followed by British Columbia's 3.1% rise. Ontario's GDP growth was just slightly below the national average, at 2.3%, while Quebec's high tech industry saw mediocre growth of 1.0%.

High technology plays a far bigger role in the United States

High technology has a far more significant presence in the United States compared to Canada. Almost 10% of the United States' gross domestic product was generated by the high tech sector in 2007, or just over $1.4 trillion.[6] By comparison, high tech comprised just over 6% of Canada's GDP and Canadian high tech output was about 6% of the US total.

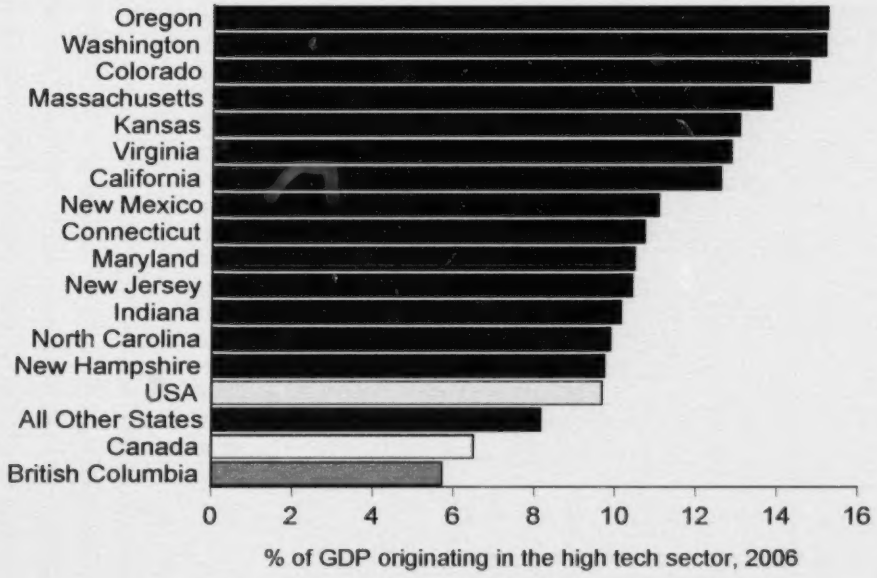
Three states lead the way in terms of the greatest dependence on the high technology sector. The high tech sectors in Oregon, Washington and Colorado each produced about 15% of their respective state's GDP in 2006.[7] It may surprise many who see Oregon as mainly a producer of lumber, but the state also is a significant manufacturer of high technology goods. Portland is home to the factories of high tech giants such as Intel and Hewlett-Packard. Washington State has substantial software and aerospace sectors, led by industry leaders Microsoft and Boeing, respectively. Colorado is home to a large telecommunications hub and has significant computer services and computer manufacturing industries.

[6] All dollar figures for the United States have been restated in Canadian currency to allow direct comparison with comparable Canadian figures. An annual average of the Canada/US exchange rate was used to perform this conversion. All GDP figures for the US are in current dollars and comparisons with Canada and the provinces are made using current dollar figures.

[7] GDP data by state are not yet available for 2007.

High tech industries play a significant role in the economies of many US states

Figure 2



In terms of total size, California has by far the largest high tech sector in the United States, generating $248.5 billion in GDP in 2006, or 17% of the nation's total high tech GDP. High technology accounted for almost 13% of the state's GDP, driven by the computer industry in Silicon Valley, the large motion picture industry and a significant telecommunications presence. The GDP from California's high tech sector alone was almost three times that of all high tech output in Canada as a whole.

Overall, high technology plays a far more significant role in the economy of most American states compared to Canadian provinces. In 2006, there were over 30 states where high tech contributed more to GDP than in British Columbia. Even in Quebec, where high tech generated 7.8% of GDP in 2006, the province ranked below 23 states. In absolute terms, 28 states had larger high tech sectors than British Columbia in 2006 based on GDP generated by the sector. Even Ontario, with the largest high tech sector in Canada, trailed 11 states in terms of high technology GDP in 2006.

Revenue

Robust growth for high technology revenue in 2007

High tech revenue in BC rose 8.4% to $18.1 billion in 2007

For the sixth consecutive year, **revenues** in British Columbia's high technology sector experienced robust growth, climbing 8.4% in 2007 to $18.1 billion.[8] All the gains were in the service sector, as revenues from high tech manufacturing industries actually declined 4.3%. Services, which are the source of the bulk of revenues in BC's high technology sector, boosted revenues by 10.8%.

Revenue is the amount of money earned from the sale of goods or services by producers in an industry. It is a measure of the monetary value of an industry's goods and services, and in the manufacturing sector, is measured through the value of shipments. Revenue includes the cost of the inputs necessary to make the goods or services, while GDP is the amount remaining after all costs (except labour costs) have been paid.

Within the service sector, the telecommunications industry, which brings in the most revenues of any high tech industry group in the province, posted the strongest growth, as revenues rose 15.2%. The motion picture production and post production industry also saw a significant increase in revenues (+12.7%), despite the drop in foreign-based productions shooting in the province. An increase in domestic productions and in post production work helped offset the reduction in American projects filming in the province. Engineering services (+10.7%) and software publishing (+13.8%) also recorded double-digit increases in revenues, while other computer and related services (+4.0%) and "other services" (+6.1%) also experienced strong growth.

BC records highest rate of growth in high tech revenues

The 8.4% growth in revenues from British Columbia's high technology sector was far and away the strongest of any of the high tech provinces, and well above the Canadian average of 3.0%. Ontario (+5.1%) posted the next strongest growth, followed by Quebec (+1.4%). After four years of strong growth, high tech revenues in Alberta dipped slightly in 2007 (-0.1%). Nevertheless, the $18.3 billion earned by Alberta's high tech sector still exceeded BC's $18.1 billion total, placing BC fourth in the country.

[8] Note that all revenue, wage and trade figures in this report are in current dollars as sufficient information is not available to calculate constant dollar figures. As such, growth rates include the effects of inflation.

Employment

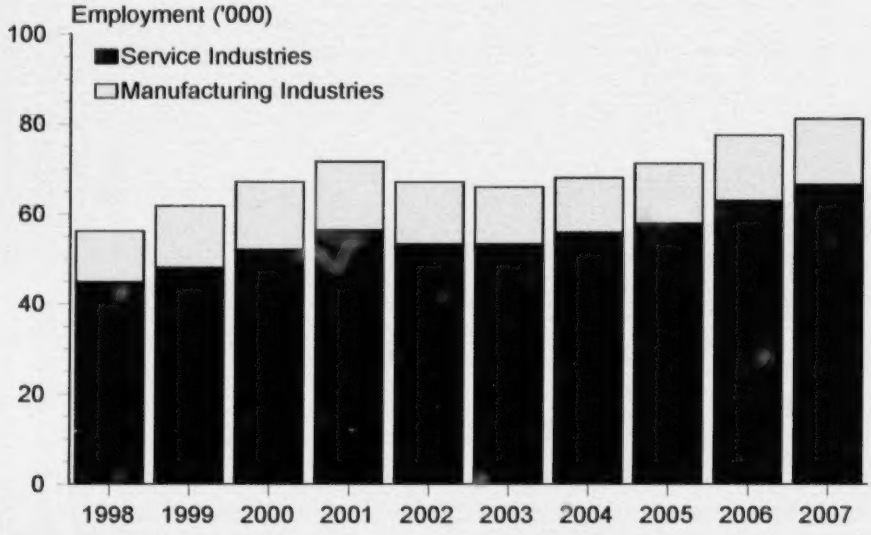
More people were employed by high tech in BC in 2007

The number of people employed by British Columbia's high technology sector hit a new high once again in 2007.[9] High tech employment in the province climbed 4.8% in 2007 to 81,140. The service sector led the way, adding approximately 3,570 net new jobs, an increase of 5.7% over 2006. Employment in high tech manufacturing industries was also higher, edging up 0.9%. For the fourth consecutive year, job growth in BC's high tech sector exceeded that of overall employment in the province, which grew only 3.1%.

High tech employment in BC increased 4.8% to 81,140 in 2007

High tech employment at all-time high in 2007

Figure 3



Despite the strong growth over the last few years, there are indications that the province's tight labour climate has acted as a con-

[9] The measure of employment used in this report is based on Statistics Canada's Survey of Employment, Payroll and Hours (SEPH). This employer survey provides a wealth of detail about employment, wages and hours in a large number of industries. However, because it is an employer survey, the SEPH data does not include self-employed workers and workers in commercial fishing, agriculture and some services.

The data from SEPH give an average number of workers in an industry through the course of the year. If an industry is highly seasonal, the peak number of workers is offset by those months where there are fewer workers. A full-time worker is accorded equal status with a part-time worker. No attempt is made to measure the number of "person years" or "full-time equivalents."

straint to even greater growth. A report from TechTalentBC, an initiative of the British Columbia Technology Industry Association (BCTIA), suggests that high technology firms in the province expected an increase of 10,000 net new jobs in the tech sector (excluding motion picture production and post-production) between September 2007 and September 2008.[10] Last year's edition of the report suggested the need for 9,000 new employees. Given that there was only an increase of 3,290 jobs (outside of the motion picture and post-production industry) between 2006 and 2007, one can only conclude that recruitment problems prevented the high tech sector from further growth.

High tech employment growth in BC may be constrained by a shortage of labour

Data from Statistics Canada's *Labour Force Survey* support the contention that the labour supply is tight for the tech sector as industry groups in which high tech industries are prevalent have significantly lower unemployment rates, not only in British Columbia, but also in Canada in general. For example, the professional, scientific and technical services industries recorded an unemployment rate of only 1.8% in 2007 in BC, compared to a provincial aggregate of 4.2%. Information, culture and recreation, which includes telecommunications and motion picture production, also posted a lower rate, with unemployment at 3.4%.

In addition to a tight supply of labour, other barriers to hiring new staff include the high price of housing in the metro areas of the province, lower wages and the relatively small size of the sector. On the positive side are quality of life issues, including the province's natural beauty and the liveability of its cities. The development of some high tech clusters may also be a draw for potential employees.

Most of BC's tech workers are in the service sector

Approximately four out of every five people working in the high technology sector in British Columbia are employed in a service industry. The largest high tech service industry group, other computer and related services (excluding software publishing), employed more people than all high tech manufacturing industries combined. There were 14,610 high tech manufacturing employees in BC in 2007, compared to 18,620 workers in other computer and related services' jobs.

[10] TechTalentBC. (February 2008). *Labour Trends in the British Columbia Technology Sector*. British Columbia Technology Industry Association.

All high tech service industries experienced robust employment growth in 2007, with percentage increases ranging from a high of 10.3% in software publishing to a low of 3.7% in other computer and related services. Growth in all the high tech service industries exceeded the 3.1% rate of growth for overall employment in the province.

BC Employment, 2007

	Workers	% change
Manufacturing	14,610	0.9
Services	66,530	5.7
High Tech Total	**81,140**	**4.8**
BC Total	**1,888,940**	**3.1**

Overall, approximately 4.3% of the province's work force was employed in the high technology sector in 2007. The 81,140 people working in high technology industries in BC in 2007 exceeded the total number of British Columbians working in the forest sector, which includes logging, silviculture and wood and paper manufacturing industries (approximately 60,600 employees), and mining, oil and gas extraction industries (15,100 employees) combined.

In BC, more people work in high tech than in forestry and mining-related industries

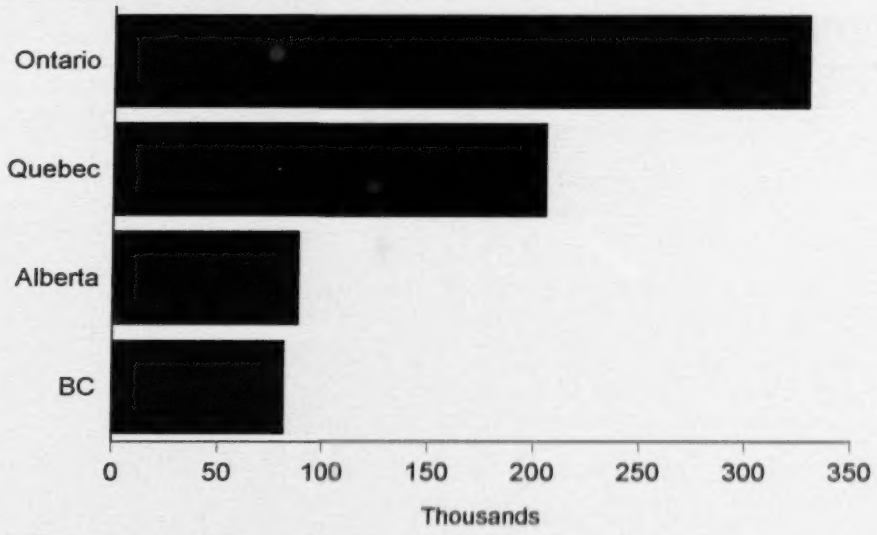
BC has the fourth largest high tech workforce in Canada

Although BC's high tech workforce has been growing at a faster rate than the national total for much of the last decade, BC still trails Alberta in terms of high tech employment, ranking it fourth in the country. Ontario is home to about 42% of the country's high tech workforce, with 328,930 high tech employees. Quebec has just over a quarter (26%) of Canada's high tech employees, more than Alberta (11%) and BC (10%) combined. Nevertheless, among the high tech provinces, British Columbia recorded the strongest growth in high tech employment in 2007, as the 4.8% increase in high tech jobs was more than double the 2.0% growth in employment in Alberta. Overall, Canadian high tech employment edged up only 0.3%. Ontario trailed the national figure slightly, at 0.2%, while the number of high tech jobs in Quebec fell 1.1%.

BC's had the strongest growth in high tech employment in 2007

Figure 4

BC ranks fourth in high tech employment in Canada, 2007



British Columbia's 4.3% ratio of high tech workers to total provincial employment is the lowest among the high tech provinces. Quebec, at 6.3%, has the largest share of its workforce in the high tech sector, followed by Ontario (6.0%) and Alberta (5.1%). The high tech sector employs approximately 5.4% of all workers in Canada.

A relatively greater percentage of Americans are employed in high technology industries

In comparison to Canada, the United States has a slightly greater proportion of its workforce employed by high technology industries. In 2007, approximately 5.9% of American employees worked in high technology industries.[11] The percentage of employees in high tech industries varied from a high of 9.5% for Washington State to a low of 2.6% in Wyoming. Other states with a substantial portion of their employment provided by high technology included Massachusetts (9.4%), California (8.8%), Virginia (8.6%) and Colorado (8.4%).

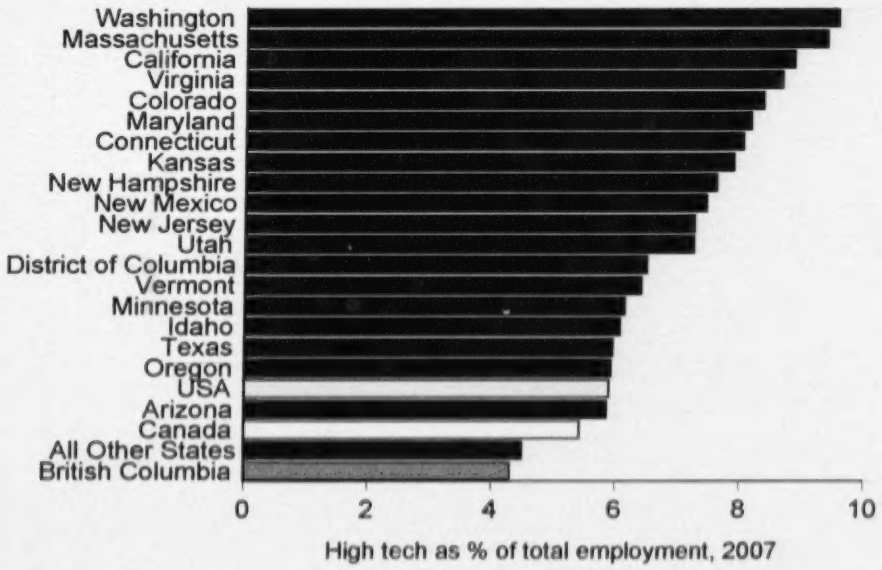
A total of 32 states ranked ahead of British Columbia in terms of importance of the sector as an employer.[12] Quebec's 6.3% of employment generated by high technology, the highest rate in Canada, ranked behind Vermont, which placed 14th in the United States.

[11] Similar to the Canadian numbers, the employment data used in this report comes from an employer survey, so self-employed workers are excluded.

[12] For ease of reporting, the District of Columbia is counted as a state.

Washington State has the largest share of employment comprised of high technology workers

Figure 5



Just under eight million people were employed in the United States' high technology sector in 2007, an increase of 1.7% from a year earlier. About 17%, or 1.4 million, of these workers were from California. In that state, over a third (36%) of high tech employees worked for computer manufacturing and software services companies. Telecommunications firms, the motion picture industry and engineering companies were also major high tech employers in California. California's high tech employment was more than double that of second-ranked Texas, which had just over 0.6 million employees in the sector in 2007.

Compared to Canada, manufacturing plays a far more significant role in the high technology sector in the United States. In 2007, a third (33%) of all high tech jobs in the United States were in manufacturing industries, compared to only 27% for Canada and 18% for British Columbia. There were seven states where manufacturing industries employed at least half of the state's high tech workforce, topped by Vermont, where 57% of high tech employment was in manufacturing industries. Computer and electronic manufacturing alone employed almost 42% of all high tech workers in the state. At the other end of the scale, high technology employment in the District of Columbia, Alaska and Hawaii was almost all in the service sector with 2% or less of high tech workers in those states employed in manufacturing industries.

Wages and Salaries

High tech wages and salaries hit new heights in 2007

British Columbia's high technology sector paid out almost $4.7 billion in wages and salaries[13] to its employees in 2007, a 6.9% increase over the compensation paid a year earlier. As a result of stronger employment growth, the rate of growth in high tech wages and salaries exceeded that of overall wages and salaries for the province (+5.9%). The wage growth for the high tech sector as a whole occurred despite a 4.4% drop in remuneration for workers in high tech manufacturing industries, as pay in high tech services climbed 9.3%.

High tech wages and salaries in BC climbed 6.9% to $4.7 billion

Higher employment levels were responsible for a portion of the increased wages and salaries, but average weekly earnings for high tech workers also increased, rising 2.0%. High tech service employees earned 3.4% more in 2007; however, this was tempered by a drop of 5.3% in average earnings in the manufacturing sector. As a result, growth in average earnings for the high tech sector trailed that of the province as a whole, which saw earnings climb 2.7%. The largest increase in compensation in the high tech sector was in the telecommunications industry, at 10.3%. Pay in other computer and related services jobs (excluding software publishing) actually dipped 1.8%, possibly signalling that the 660 net new employees in this industry were less experienced and therefore earned less than those already employed in the industry.

Those people working in high technology jobs are paid far more than the average employee in the province. High tech workers earned an average of $1,100 per week, compared to an overall average of only $760 for employees in all industries. The biggest difference between high tech wages and overall earnings was in the service sector, where the average weekly wage was $1,140 in high tech industries compared to only $720 in the service sector overall. In fact, as a result of the significant decline in earnings in 2007, employees in high tech goods industries actually earned less

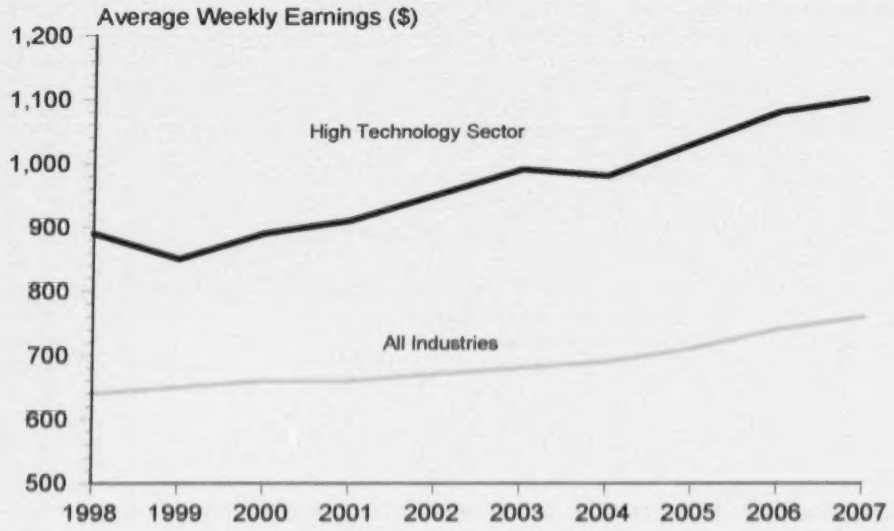
Average weekly earnings are far higher in high tech industries

[13] Wages and salaries are based on the earnings of all workers in an industry who are on the payroll, from working owners and senior executives to junior support staff. While overtime and bonus pay are included, other benefits such as medical plans, stock options and time off in lieu of overtime are not. Like the employment values described earlier in this report, the wages and salaries data are calculated using source data from Statistics Canada's Survey of Employment, Payroll and Hours.

per week ($950) compared to the overall average for workers in British Columbia's goods industries ($960).

Wages in high technology industries are far higher than the average for all industries in the province

Figure 6



The wage disparity in high tech is likely due to a combination of greater skill requirements relative to many jobs, as well as a strong demand for skilled high technology workers, therefore requiring greater pay to both attract and retain them.

With so many employment opportunities available due to shortages of both skilled and unskilled labour, high tech employers in BC and elsewhere will likely have to enhance their wage and benefit packages even further in order to attract qualified employees from other jurisdictions or to encourage more young people to pursue training in relevant areas.

Earnings of high tech workers in BC above national average

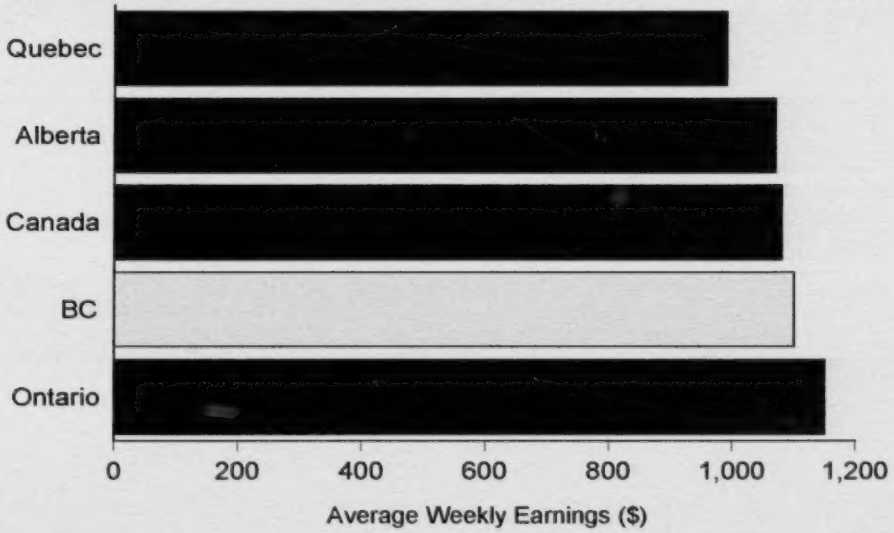
British Columbia high tech employers actually already offer higher wages compared to the national average. BC's average weekly earnings of $1,100 for high tech workers are slightly higher than the Canadian average of $1,080. Ontario is the only high tech province to offer higher wages than BC, at an average of $1,150 per week.

All the high tech provinces experienced wage inflation in the high technology sector in 2007, led by Quebec, which recorded a 3.3% increase in average weekly earnings. Nevertheless, Quebec still had the lowest wages among the high tech provinces, at $990 per week. British Columbia's 2.0% rise in earnings was slightly lower than the

Canadian average of 2.3% growth, but Ontario had the slowest growth in earnings, with a 1.1% rise. Average earnings in Alberta climbed 2.6%, but Alberta's average pay of $1,070 per week for high tech workers still trailed BC.

Figure 7

BC high technology average earnings exceeded the national average in 2007



However, compared to the high tech sector in the United States, wages in Canada are relatively low. In 2007, the average weekly wage for high tech workers in the United States was about $1,657, ranging from $990 in South Dakota to $2,034 in California. British Columbia was well behind most states in terms of compensation for high technology employees. Given this disparity, one can see why high tech companies in British Columbia may have trouble recruiting employees when the labour market is as tight as it is. Part of the problem is the size of the high tech businesses in British Columbia. Most of the companies are small and likely cannot afford to pay as much as larger businesses in the United States, or even in Ontario.

American high tech workers earn more, on average, than their Canadian counterparts

Establishments

Fewer high tech establishments in 2007

There was a significant decline in the number of high technology **establishments** (excluding those with no employees) in the province in 2007. Overall, there were 633 fewer establishments in 2007, a 6.9% drop from 2006. Given the increase in high tech employment in the province, this would seem to indicate that there was consid-

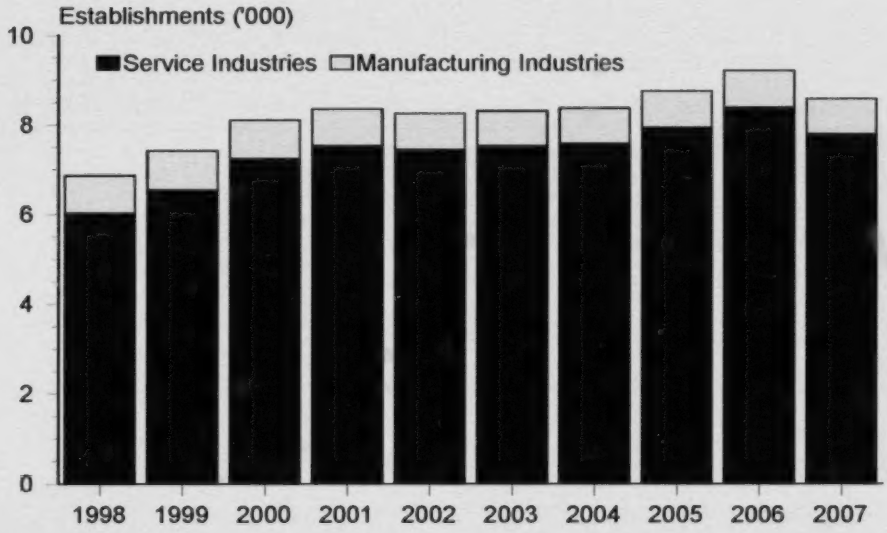
erable consolidation in the high tech sector, with a number of smaller operations merging to create larger businesses. Both manufacturing (-5.2%) and service sector industries (-7.0%) experienced a decline in the number of establishments.

An **establishment** is the smallest accounting unit within a firm that can report certain financial data. A single company may contain a number of establishments. To be included in the tabulations, the establishment must have paid employees; owner-operated firms with no paid employees are not included.

British Columbia's high technology sector is dominated by service industries as 91% of all high tech establishments in the province are in the service sector. There were 7,796 high tech service sector establishments in the province in 2007 and an additional 777 in high tech manufacturing industries.

About 91% of high tech establishments in BC are in service industries

Figure 8



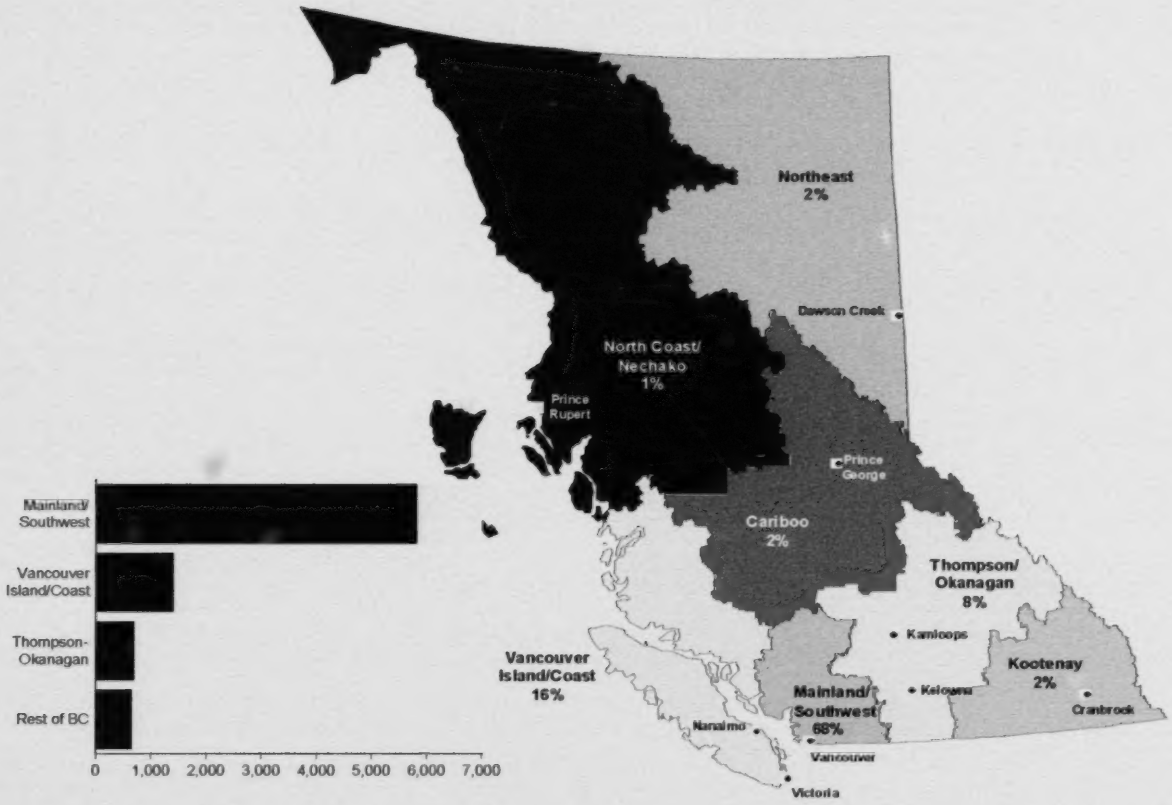
By far the largest industry group within British Columbia's high tech sector is computer and related services with 37% of all high technology establishments. "Other services" (21%) and engineering services (21%) are the next two largest high tech industry groups. Within "other services," environmental and technical consulting industries are the largest component, making up over half of the establishments in the "other services" industry group.[14]

[14] Note that there is a slight data break between 2005 and 2006 for the "Telecommunications" and "Computer and related services" industry groups. See the note at the end of Appendix A for details.

High tech establishments are located where the people are

High technology establishments are most often located in the more densely populated areas of the province. In 2007, more than two-thirds (68%) of British Columbia's high tech establishments were located in the Mainland/Southwest Development Region and the vast majority of these were in Greater Vancouver. Vancouver Island/Coast was home to 16% of the province's high tech businesses, with almost two-thirds of these located in the Capital region, and Thompson-Okanagan was the location for 8% of BC's high tech establishments.

Figure 9 **Over two-thirds of high tech establishments are in the Mainland/Southwest, 2007**



The Mainland/Southwest region is home to the head offices of the largest tech companies in the province, including Telus, MacDonald, Dettwiler and Associates, Sierra Wireless and Creation Technologies just to name a few. There are a number of high tech clusters either already established or beginning to develop in the Greater Vancouver region, including alternative energy companies such as Ballard Power Systems and Xantrex Technology, digital

media and gaming developers such as Electronic Arts and Radical Entertainment, biotechnology firms such as StemCell Technologies, QLT and Angiotech Pharmaceuticals, and a burgeoning wireless sector. There was a 7.1% contraction in the number of high tech establishments in the Mainland/Southwest region in 2007, but as mentioned earlier, this is likely due to consolidation of smaller enterprises into larger ones, as high tech employment in the province increased.

The Vancouver Island/Coast region has a strong computer services sector providing application and software development, as well as website hosting and design. While Greater Victoria is home to the bulk of the high tech companies in this region, high technology has a significant presence in the areas outside the Capital region as well. As was the case almost everywhere in the province, the number of establishments in the Vancouver Island/Coast region dropped in 2007. There were 125 fewer establishments in the region compared to a year earlier, a reduction of 8.2%.

A significant portion of the high technology sector in the Thompson-Okanagan region is comprised of software developers, but there are also a wide variety of other high tech businesses in the area. Recently, IBM touted Kelowna as a perfect location in which to build a data storage centre opening up the possibility that the region could become a global storage hub. The availability of inexpensive hydro-electric power, combined with cold winters that will reduce the need to cool the thousands of servers, are big advantages for Kelowna in terms of being a data storage centre, particularly given the growing concern over greenhouse gas emissions by the computer service industry due to its massive power consumption. In 2007, the number of high tech establishments in the Thompson-Okanagan region declined 4.7%, following the trends of elsewhere in the province.

In the remainder of the province, there are a variety of high technology businesses ranging from telecommunications to environmental technologies, but software, web design and hosting are the most common high tech businesses. With the exception of the Northeast region, which maintained the same number of high tech companies as it had in 2006, all other regions saw a significant decline in the number of establishments.

High tech manufacturing industries employ more people

On average, establishments in the service sector tend to have fewer employees compared to those in manufacturing industries. Of businesses with employees, 10% of high tech manufacturers employed

more than 50 workers, compared to less than 4% of high tech service industries. While less than half (46%) of high tech manufacturing industries (excluding self-employed with no paid help) have less than five employees, 70% of the establishments in the service sector fit this description.

Self-Employment

Self-employment[15] in the high tech sector

Some of the high technology industries are ideally suited to self-employment, where the skills, knowledge and energy of the individual are more important than large capital investment. The available data appears to confirm this, as almost two-thirds (65%) of the businesses in BC's high technology sector had no paid employees in 2007. As one would expect, businesses involved in manufacturing are far less likely to be comprised of self-employed individuals with no employees. Only 41% of all high tech manufacturing establishments had no employees, compared to 66% of high tech service establishments.

Self-employment is widespread in the high technology sector

Establishments, 2007

	Without Employees	With Employees
Manufacturing	545	777
Services	15,088	7,796
High Tech Total	**15,633**	**8,573**
BC Total	**225,415**	**167,252**

The proportion of high tech businesses that have no employees is significantly higher than that of the rest of the economy. The proportion of all businesses in the province that had no employees in 2007 was only 57%.[16]

[15] There is currently no perfect measure of self-employment in the high tech sector available. The figures quoted here are based on a tabulation of the number of establishments with no employee payroll. This approximates the number of self-employed with no employees (those with employees will be counted in the number of establishments discussed earlier). This is only an approximation because the figure may also include companies that hire only contractors, or companies with unpaid family workers. *Note that it would be erroneous to add these establishment counts to the total number of high technology workers reported elsewhere in this report due to the differences in what they are measuring.*

[16] Note that as a result of a methodological change, the figures for establishments with no employees have increased significantly in 2007 compared to data reported in previous editions of this publication. Companies with less than $30,000 in revenue are now included in the count, whereas before they were not.

Commodity Exports and Imports

Trade is of vital importance to BC's high technology industry

International trade is an important aspect of the high technology sector, as reflected in the high volume of two-way trade. The domestic market for high technology goods does not have sufficient volume to achieve the economies of scale needed to remain competitive. Therefore, access to international markets is extremely important as it allows BC producers of high tech goods to focus on market niches. At the same time, BC manufacturers do not produce enough of some types of high technology equipment to satisfy the domestic demand from either consumers or the high technology industry itself, and as a result, large volumes of goods are imported into the province.[17]

High tech exports continue to climb

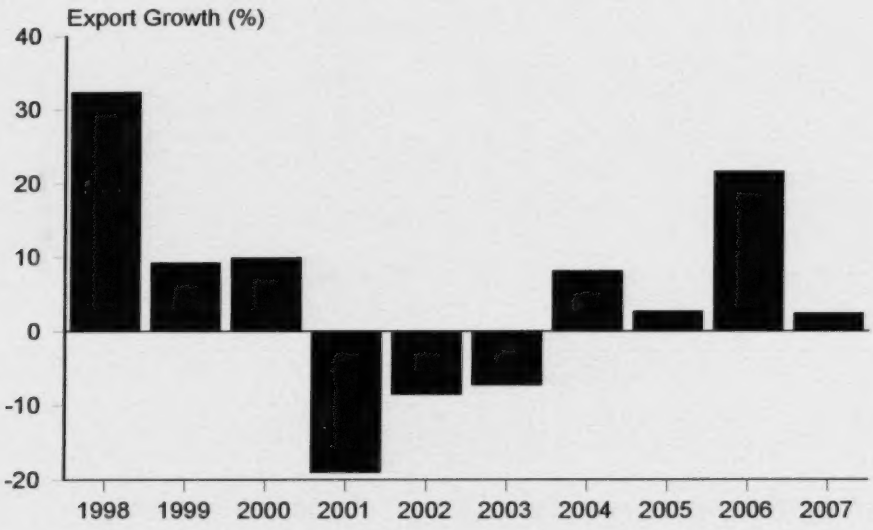
Despite being faced with the challenge of the Canadian dollar reaching par with its American counterpart, British Columbia exporters of high technology goods managed to boost the value of their shipments to international destinations up 2.4% in 2007, to $877.1 million. This was significantly better than the performance of overall goods exports, which dropped 5.8%, marking the second straight year that exports of high technology products and overall commodity exports have moved in opposite directions. As a result, the proportion of overall exports comprised of high technology goods climbed to 2.8%, the highest share since 1999, and approaching the peak of 3.0% achieved in 1998.

The value of BC origin high tech exports climbed 2.4% in 2007

[17] High technology goods referred to in this document are based on a list developed by the US Bureau of the Census and modified to fit Canadian conditions. See Appendix B, "Defining High Technology Commodities" for more information.

Figure 10

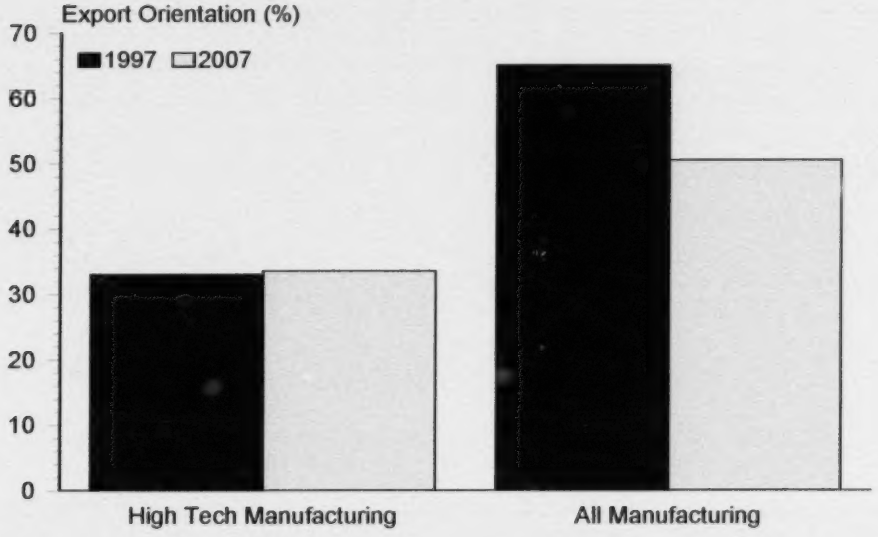
BC's high technology exports edged up in 2007



Although exports are important to the high tech sector, BC's high technology manufacturing industries tend to be geared more toward the Canadian market, particularly compared to manufacturing in the province in general. In 2007, just over 33% of total high tech shipments were exported compared to 51% of manufactured goods overall. The gap was even wider a decade earlier, but in the last several years, the proportion of BC's manufactured goods that are exported has been falling, possibly as a result of an appreciating dollar that made BC products more expensive to foreign buyers.

Figure 11

A smaller portion of high technology products are exported compared to total manufacturing

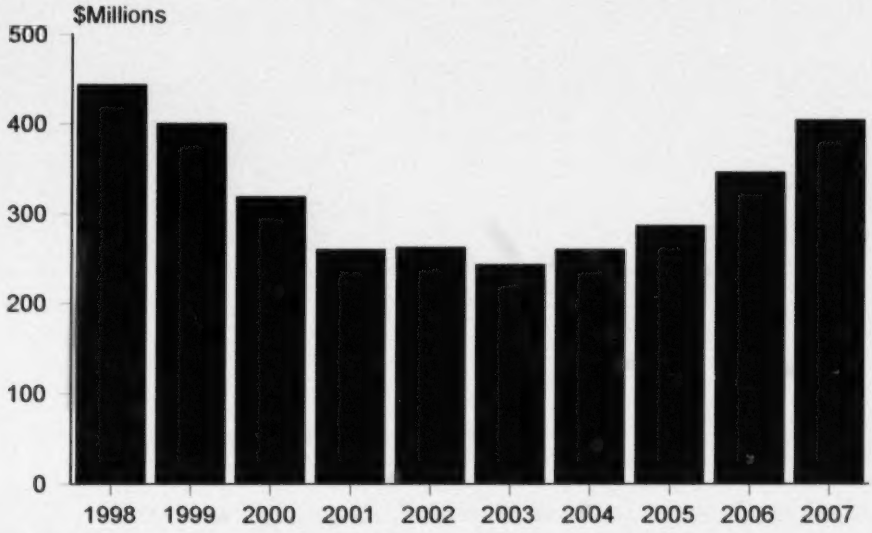


Export growth concentrated in specific commodity groups

The bulk of the growth in high tech exports was concentrated in just a few commodity groups.[18] Computers and telecommunications equipment are by far the most significant group of high technology goods exported from British Columbia. Almost half (46%) of the province's high tech exports are comprised of goods from this commodity group, with international shipments of computers and telecommunications equipment amounting to $403.7 million in 2007. It was also the largest source of high tech export growth in 2007, with the value of shipments of these goods climbing 16.9%, an increase of over $58 million. Other major contributors to the overall increase in high technology exports were aerospace goods, which experienced a 7.3% increase in the value of international shipments to an all-time peak of $183.0 million, and opto-electronics, exports of which jumped 34.3% to $49.9 million.

After slumping earlier in the decade, exports of computers and telecommunications products have rebounded

Figure 12



At the other end of the scale, exports of life sciences products plunged by $46.7 million, a fall of 26.0%. A substantial drop in exports of various electro-diagnostic apparatus was the main driver of the slump in life science product shipments in 2007. Computer integrated manufactured products, the other major group of high technology exports from the province, also experienced a dip in the value of exports, slipping 7.0%. The largest percentage decline was for exports of electronics, which fell to less than half the value exported in 2006 (-54.5%). The drop was largely due to a fall off in

[18] For information on high technology commodity groups, see Appendix B.

shipments of various integrated circuits and, to a lesser extent, semiconductor devices.

British Columbia generally does not export significant volumes of goods from the remaining commodity groups. The substantial jump in exports of material design goods that occurred from 1998 through 2001 was due to large shipments of optical fibre products. With the exception of that short period, British Columbia has not been a large exporter of material design goods.

BC high technology exports by commodity group - 2007

	$ millions	% change
Computers and Telecommunications	403.7	16.9
Aerospace	183.0	7.3
Life Sciences	132.7	-26.0
Computer Integrated Manufacturing	94.0	-7.0
Opto-Electronics	49.9	-34.3
Electronics	6.4	-54.5
Biotechnology	4.4	-39.1
Material Design	2.7	27.1
Weapons and Nuclear	0.4	190.4
Total	**877.1**	**2.4**

The US is the primary destination for BC high tech exports

Almost 69% of British Columbia's high technology commodity exports were destined for the United States in 2007. This is well above the proportion of overall exports from BC that were shipped to the United States as only 60% of BC's total goods exports were US-bound in 2007. However, similar to exports in general, the ratio of high technology exports headed to the United States has been slipping over the last several years. In 2000, the share of BC's high tech exports shipped to the US peaked at just under 84%. Although the overall value of high technology goods shipped to the US is down from that peak year, mostly due to the bursting of the high tech bubble in 2001, most of the drop in share is due to diversification to other markets.

The US was the destination of 69% of BC high tech exports

Shipments to the European Union, in particular, have grown significantly in the last few years, such that 15% of BC's high tech exports were destined for the EU in 2007. Exports to Pacific Rim countries, which dropped to their lowest levels in the early part of the decade, had rebounded somewhat, before slumping in 2007. There has also been strong growth in exports to countries outside these regions, particularly Mexico and Brazil.

While exports to BC's largest market, the United States, edged up 2.7% in 2007, the strongest growth was in shipments to the European Union, which increased 19.5%. A large portion of this growth was from a 178.8% jump in exports to Germany due mainly to substantial increases in shipments of opto-electronics and computer and telecommunications products. However, exports to the United Kingdom (+13.3%) and the Netherlands (+35.9%) also experienced strong growth. Shipments to Belgium, which skyrocketed by 387.8% between 2005 and 2006, slipped back 30.8% in 2007.

Shipments to the Pacific Rim plunged 20.2% in 2007, with many of the top Asian destinations experiencing double-digit declines. BC high tech exports to Japan fell 18.1%, exports to Mainland China were down 14.5% and South Korea (-36.7%), Taiwan (-17.7%), Singapore (-15.3%) and Hong Kong (-48.7%) all saw a drop in shipments as well. Australia bucked the trend, as exports to that country jumped 23.3%.

BC high technology exports by destination - 2007

	$ millions	% change
United States	603.8	2.7
European Union	127.3	19.5
Germany	40.8	178.8
Italy	22.0	-2.3
United Kingdom	19.2	13.3
Pacific Rim	74.7	-20.2
Japan	16.1	-18.1
Mainland China	15.1	-14.5
Australia	11.8	23.3
Rest of the world	71.3	3.5
Total	**877.1**	**2.4**

Mode of transport of high tech goods depends on destination

The mode of transport of high technology goods exported from the province depends largely on the destination of those goods. For goods destined for the United States, by far the most popular mode of transport is over land by truck or rail (72%), with the remainder shipped by airfreight. For all other countries, the bulk of goods are transported by airfreight (83%), with only 9% shipped by sea and 5% over land.[19]

[19] Note that the shipments by land to destinations other than the United States are not all destined for Mexico. Goods destined for overseas destinations may leave BC by truck or rail to points of departure in the United States where they are loaded onto ships or planes for the remainder of their journey.

As a result of the diversification of the market for BC's high tech goods, there has been significant variation from year to year in the mode of transport of this merchandise. The growth in exports to countries outside of the United States has made airfreight a more popular choice. In fact, airfreight briefly supplanted shipments over land as the mode of transport used most often in 2005 and 2006, but it is likely that higher costs due to fuel surcharges has pushed shippers to other transportation choices. In 2007, exports to the United States were transported more often over land and goods shipped to other destinations were transported by sea with greater frequency.

BC high technology exports by destination and mode of transport - 2007

	Mode of Transport	$ millions	% of region	% of total high tech exports
United States	Land	434.0	71.9	49.5
	Sea	0.0	0.0	0.0
	Air	169.8	28.1	19.4
	Total	*603.8*	*100.0*	*68.8*
All other countries	Land	13.9	5.1	1.6
	Sea	23.5	8.6	2.7
	Air	236.0	86.3	26.9
	Total	*273.4*	*100.0*	*31.2*
Total	Land	447.9	51.1	51.1
	Sea	23.5	2.7	2.7
	Air	405.8	46.3	46.3
	Total	*877.1*	*100.0*	*100.0*

Imports of high technology goods increased in 2007

The value of high technology goods imported into British Columbia increased for the fourth consecutive year in 2007. Imports rose a robust 10.8% to almost $4.7 billion. After six straight years of declines, imports from the United States finally turned around, recording an increase of 8.1%. Mainland China continued to be a growing source for high tech products imported into British Columbia, with shipments climbing 14.2%, although this is the smallest percentage increase since at least 1990, the earliest year for which data are available. Mainland China trails only the United States in terms of the value of imports of high tech merchandise into BC, with just shy of $1 billion worth of goods entering the province from China in 2007. Approximately $1.6 billion worth of high tech goods were imported into BC from the United States. The rise in imports from Mainland China helped offset much of the reduction in shipments to the United States in the previous six years

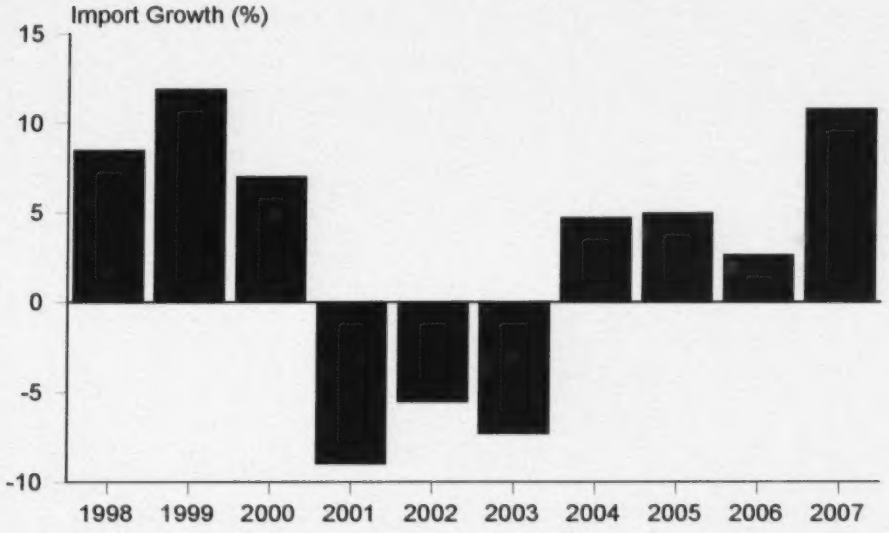
Mainland China is a growing source for BC imports of high tech goods

and now that imports from the US are on the rise, the combined growth has resulted in the first double-digit increase in BC imports of high tech goods since 1999.

A significant amount of high tech goods imported into the province is used as input into BC's own high technology manufacturing; however, a large portion of the imports from China are consumer goods such as portable computers and cellular telephones, which suggests that at least some of the growth in imports is consumer-driven and not solely due to the demand created by the domestic high tech sector.

Imports of high technology products into British Columbia increased in 2007

Figure 13



There is far more diversification in terms of origins of high tech imports compared to destinations of exports. Just over a third (34%) of BC's high tech imports originate in the United States, with a further 20% of imports sourced from Mainland China. Mexico ranks third with $494 million, or 11% of BC's tech imports originating in that country, which is more than the value of high tech goods imported from all of the European Union countries combined ($416 million, or 9%). The countries of the Pacific Rim were the source of almost 40% of high tech imports in aggregate, the second straight year and only the second time that imports from this region have exceeded those from the United States. The explosion of shipments from Mainland China is mainly responsible for this, as imports from that country have climbed almost 2,000% in the last decade.

In 2007, the value of high technology goods imported into British Columbia was over five times that of high tech exports from the

province. As with exports, computer and telecommunications goods are by far the largest category of high technology imports, comprising 60% of high tech product imports, or $2.8 billion. The next largest group of imports was aerospace goods, which were valued at just over a fifth that of computers and telecommunications goods, at $633 million, or 14% of total BC high tech imports.

The strongest percentage growth in high tech imports was for aerospace products, which recorded an increase of 40.9% in 2007, vaulting them ahead of life sciences goods to rank as the second largest high tech commodity group import into BC. In terms of absolute numbers, imports of computers and telecommunications products grew the most, increasing by almost $220 million, or 8.5%.

BC high technology imports by commodity group - 2007

	$ millions	% change
Computers and Telecommunications	2,797.6	8.5
Aerospace	633.0	40.9
Life Sciences	509.3	6.0
Opto-Electronics	304.6	10.7
Electronics	183.2	-2.3
Computer Integrated Manufacturing	154.4	-9.5
Biotechnology	59.6	31.2
Material Design	20.3	5.6
Weapons and Nuclear	20.2	-8.3
Total	**4,682.2**	**10.8**

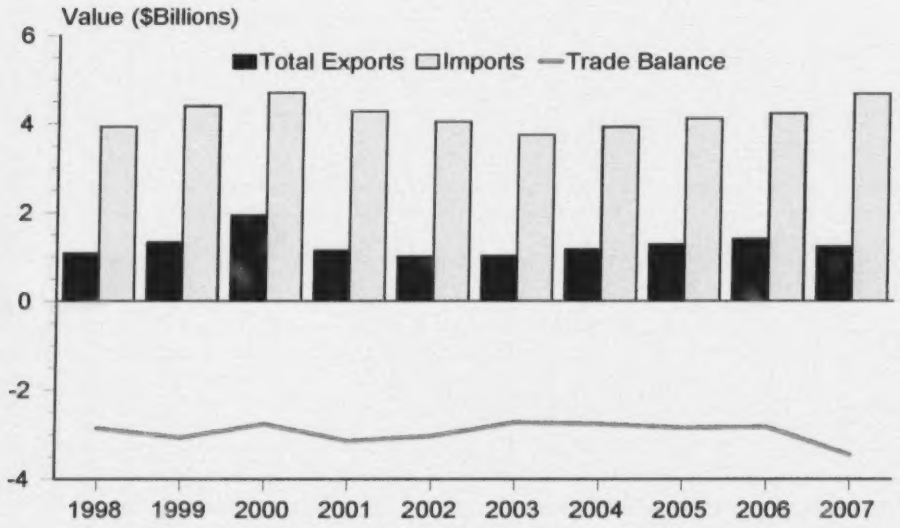
BC's high tech trade deficit widens in 2007

BC has almost a $3.5 billion trade deficit in high tech goods

British Columbia imports substantially more high technology goods than it exports and, as a result, the province runs a trade deficit in these commodities. In 2007, this deficit became even larger as imports grew at a far faster pace than exports. The deficit climbed to almost $3.5 billion, or nearly four times the total value of BC's high tech exports.

BC's imports far more high tech goods than it exports

Figure 14



The high flying Canadian dollar likely had a role in boosting high tech imports from the United States, which drove up BC's trade deficit with that country, such that it now ranks as the largest deficit at $938 million, surpassing Mainland China, which had briefly overtaken the US in 2006. British Columbia's high tech trade deficit with Mainland China is $903 million, ranking that country second behind the United States. After the United States and China, the next largest deficit is with Mexico, at $482 million, which is almost twice the combined deficit with all countries of the European Union ($248 million). BC trades very few high tech goods to Mexico, but imports a large amount, accounting for the substantial deficit.

BC balance of trade in high technology goods by commodity group - 2007

	$ millions
Electronics	13.6
Material Design	-16.7
Weapons and Nuclear	-18.9
Computer Integrated Manufacturing	-53.7
Biotechnology	-55.2
Opto-Electronics	-252.8
Aerospace	-362.7
Life Sciences	-370.9
Computers and Telecommunications	-2,335.1
Total	**-3,452.3**

The trade deficit spans across all commodity groups. As one might expect, the largest deficits are for goods with the highest volumes

of trade. The trade deficit for computers and telecommunications alone is over two and a half times the value of all BC high tech commodity exports combined.

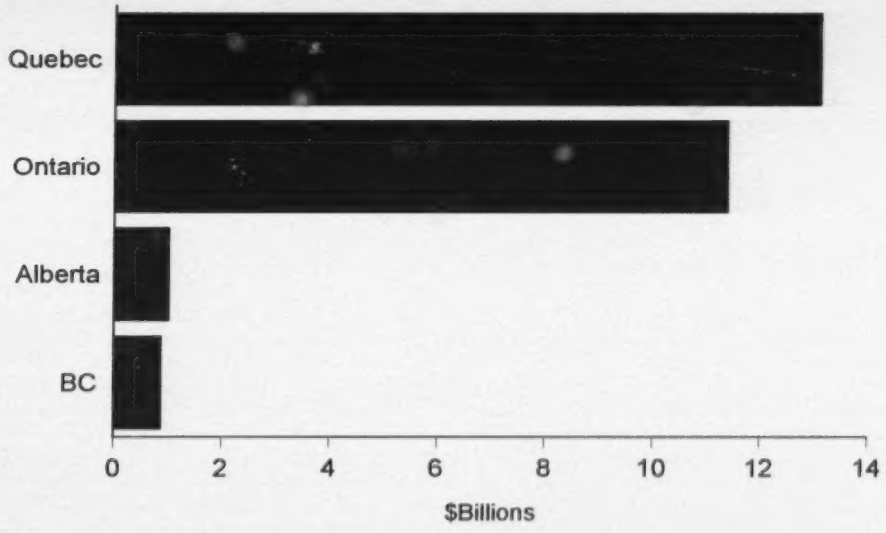
BC ranks fourth in the country in terms of high tech exports

Exports of high tech goods from British Columbia are relatively small compared to Canada's manufacturing hubs of Quebec and Ontario, which is not very surprising given the differences in the size of the economies, but BC high tech exports also lag those of Alberta. Among the Canadian provinces, Quebec was the top exporter of high technology merchandise, shipping approximately $13.1 billion worth of high tech goods in 2007. Quebec's world-class aerospace industry was the source of the bulk of these goods (71%). High technology products are far more prevalent in Quebec's international exports compared to other provinces as almost 20% of the province's commodity exports consist of high tech products. For Canada as a whole, the equivalent figure is just under 7%.

Ontario shipped $11.4 billion worth of high tech goods in 2007, ranking it second behind Quebec, but these goods comprised just over 6% of the province's overall commodity exports. Combined, these two provinces were the source of almost 90% of Canada's high technology commodity exports. Relative to these two provinces, Alberta ($1.0 billion) and BC ($0.9 billion) are small exporters of high tech products. High technology goods are also a smaller component of each province's overall commodity exports. Just under 3% of BC's international shipments were comprised of high tech goods in 2007, while just over 1% of Alberta's exports were high tech products as the energy sector was the dominant exporter in that province.

BC's exports of high tech goods are relatively small, 2007

Figure 15



British Columbia fared better in terms of export growth in 2007, trailing only Quebec among the four high tech provinces. Quebec saw its high technology commodity exports jump 5.1% in 2007, rebounding somewhat from an 8.3% drop a year earlier. British Columbia's modest 2.4% increase was better than the Canadian average of 1.9%. Elsewhere, high tech exports from Ontario dipped slightly (-0.5%), while shipments from Alberta plunged 17.6% to their lowest level since 1995. Reduced shipments of aerospace products and computer and telecommunications equipment were responsible for the slump in Alberta.

BC had the second highest rate of growth in high tech exports

The United States exports and imports relatively more high tech goods compared to Canada

High technology products play a much larger role in American commodity trade than in Canada, where less than 7% of commodity exports are high tech goods. In 2007, the United States exported $243.6 billion worth of high tech commodities, which represented almost 22% of total US domestic exports. Only Quebec, at just under 20%, has a comparable ratio of high tech to overall goods exports.

The difference is much smaller for commodity imports, with high technology products comprising slightly less than 17% of all imports into the United States, compared to just over 12% of imports into Canada.

American domestic exports of high technology goods (denominated in Canadian dollars) climbed 2.7% in 2007, while imports grew 6.4%, to $351.1 billion. As recently as 1997, the United States had a surplus in trade of high tech goods of over $45 billion, but strong growth in imports coupled with very little increase to exports has put American trade in high technology goods into a deficit position for the last six years. The stronger growth in imports in 2007 increased that deficit, pushing it up to over $57 billion.[20] The phenomenal growth in imports from Mainland China is the main reason for the flip from surplus to deficit. The United States had a high tech trade deficit of $72.7 billion with China in 2007. The next largest deficit was with Mexico, at $23.0 billion. At the other end of the scale, the United States largest surplus in trade of high technology goods was with Canada, at $9.1 billion.

Service Exports

Exports of high tech services edge up in 2007

Service exports are generally more difficult to measure compared to exports of goods. Some service exports take place when BC-based professionals, such as engineers or software programmers, work for a period of time outside the province. Service exports also occur when, for example, an engineering firm produces a study in its BC office for an overseas client or when a software developer creates a new program that is "shipped" on-line to a client in another country.

Despite the appreciation of the Canadian dollar relative to its American counterpart, the value of high tech service exports experienced robust growth in most of the high tech industries. The motion picture production and post-production industry was the one major exception as the higher dollar, combined with a strike by screenwriters, resulted in far fewer foreign productions shot in the province. As a result, service exports from this industry plunged 43.6%. This substantial decline tempered overall growth in high tech service exports. BC's high tech service exports grew only 1.5%, well below the national growth rate of 5.2%.

BC high tech service exports edged up 1.5% in 2007 to almost $2.7 billion

The industry with the most significant service exports from BC is software publishing, which exported over $1 billion worth of ser-

[20] Note that the balance of trade is calculated by taking the difference of total exports (including re-exports) and subtracting imports. The $243.6 billion export figure for 2007 excludes re-exports, which were $50.1 billion.

vices in 2007, a 13.8% jump from a year earlier. Exports from this industry comprised 41% of the almost $2.7 billion in high technology service exports from BC in 2007. The largest percentage growth in high tech service exports in 2007 was in services provided by the telecommunications and related industry group, at 15.2%.

The high technology sector in British Columbia exports far more services than goods. In 2007, services represented three-quarters (75%) of BC's total high technology exports (i.e., goods plus services). Nationally, the story is quite different. Service exports comprised only 31% of total high tech exports. Canada's high tech manufacturing is concentrated mostly in Quebec and Ontario and a large percentage of these goods are produced for export, which is one of the reasons for the greater emphasis on goods exports for Canada's high tech sector as opposed to the domination of service exports in British Columbia.

Conclusion

High technology sector in BC is small, but growing

Relative to other jurisdictions, particularly American states, British Columbia's high technology sector is still small. Nevertheless, the sector has been growing and is becoming a more integral part of the provincial economy, employing more people than BC's traditional economic powerhouses, the forestry and mining industries. While the sector as a whole may not rank prominently compared to other high tech jurisdictions, BC is home to some high tech clusters, such as fuel cells and motion picture production, that are world class and, in some cases, world leaders. Given the significance of high technology products in today's world and the combination of lucrative revenues and well-paid employment offered by the sector, there is little doubt that high technology will continue to attract attention in British Columbia and elsewhere.

Detailed Tables

The tables in this section include a notation of "r" to indicate data that have been revised from previous editions and "p" to indicate that the data are preliminary. Most data for 2007 are denoted as preliminary, which should not be construed as meaning that there are problems with the data, but rather that they are based on information that itself is preliminary and therefore are subject to greater revision than data for previous years.

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Table 1. Gross Domestic Product (GDP) (Constant Dollar) at Basic Prices,[1] by Industry, 1997-2007

	2002 $ million										
INDUSTRY	**1997[r]**	**1998[r]**	**1999[r]**	**2000[r]**	**2001[r]**	**2002[r]**	**2003[r]**	**2004[r]**	**2005[r]**	**2006[r]**	**2007[p]**
Manufacturing	**560**	**605**	**759**	**1,250**	**1,093**	**908**	**894**	**1,012**	**1,004**	**1,148**	**1,129**
Services	**3,996**	**4,319**	**4,570**	**4,982**	**5,208**	**5,822**	**6,230**	**6,447**	**7,275**	**7,883**	**8,180**
Motion picture production & post production	152	176	246	244	265	265	*	*	*	*	*
Telecommunications	1,959	2,000	2,232	2,419	2,376	2,728	*	*	*	*	*
Engineering services	1,086	1,047	935	926	987	942	929	934	952	1,001	1,079
Computer and related services	648	885	953	1,145	1,306	1,439	*	*	*	2,297	2,405
Other services	174	250	215	248	274	448	456	585	625	670	644
High Technology Sector Total	**4,519**	**4,884**	**5,302**	**6,235**	**6,302**	**6,730**	**7,124**	**7,458**	**8,287**	**9,035**	**9,319**
BC Industrial Aggregate	**111,554**	**112,913**	**116,307**	**121,546**	**122,848**	**126,761**	**130,026**	**135,396**	**141,216**	**146,284**	**150,442**

	% change from previous year									
INDUSTRY	**1998[r]**	**1999[r]**	**2000[r]**	**2001[r]**	**2002[r]**	**2003[r]**	**2004[r]**	**2005[r]**	**2006[r]**	**2007[p]**
Manufacturing	**8.0**	**25.6**	**64.7**	**-12.6**	**-16.9**	**-1.5**	**13.2**	**-0.8**	**14.4**	**-1.7**
Services	**8.1**	**5.8**	**9.0**	**4.5**	**11.8**	**7.0**	**3.5**	**12.8**	**8.4**	**3.8**
Motion picture production & post production	16.2	39.9	-1.0	8.8	-0.1	*	*	*	*	*
Telecommunications	2.1	11.6	8.4	-1.8	14.8	*	*	*	*	*
Engineering services	-3.7	-10.6	-1.0	6.6	-4.6	-1.4	0.5	1.9	5.2	7.8
Computer and related services	36.6	7.7	20.1	14.0	10.2	*	*	*	*	4.7
Other services	43.7	-13.7	15.1	10.3	63.6	1.8	28.5	6.7	7.3	-4.0
High Technology Sector Total	**8.1**	**8.6**	**17.6**	**1.1**	**6.8**	**5.9**	**4.7**	**11.1**	**9.0**	**3.1**
BC Industrial Aggregate	**1.2**	**3.0**	**4.5**	**1.1**	**3.2**	**2.6**	**4.1**	**4.3**	**3.6**	**2.8**

1. Industry-based GDP data are now reported at basic prices. Previously a "factor cost" method of calculation was used. The difference between the basic price and factor cost concepts is that the factor cost estimate includes all subsidies and excludes all indirect taxes.

* Data has been suppressed due to confidentiality requirements.

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

Table 2. Gross Domestic Product (GDP) (Current Dollar) at Basic Prices,[1] by Industry, 1997-2007

$ million

INDUSTRY	1997r	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
Manufacturing	**743**	**734**	**920**	**1,254**	**1,096**	**908**	**925**	**1,007**	**956**	**1,106**	**1,077**
Services	**4,380**	**4,720**	**4,656**	**5,026**	**5,216**	**5,822**	**6,422**	**6,798**	**7,734**	**8,339**	**9,258**
Motion picture production & post production	113	149	217	227	249	265	*	*	*	*	*
Telecommunications	2,408	2,390	2,394	2,482	2,401	2,728	*	*	*	*	*
Engineering services	1,008	1,009	837	884	963	942	940	1,003	1,271	1,544	1,709
Computer and related services	707	959	1,031	1,210	1,341	1,439	*	*	*	2,175	2,291
Other services	144	214	178	224	262	448	464	611	674	737	783
High Technology Sector Total	**5,123**	**5,454**	**5,576**	**6,280**	**6,311**	**6,730**	**7,347**	**7,805**	**8,690**	**9,445**	**10,335**
BC Industrial Aggregate	**104,554**	**105,907**	**110,806**	**120,756**	**122,773**	**126,761**	**133,213**	**144,180**	**155,179**	**165,381**	**174,401**
High Technology as a % of Total	**4.9**	**5.1**	**5.0**	**5.2**	**5.1**	**5.3**	**5.5**	**5.4**	**5.6**	**5.7**	**5.9**

% change from previous year

INDUSTRY	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
Manufacturing	**-1.2**	**25.3**	**36.4**	**-12.6**	**-17.2**	**1.9**	**8.9**	**-5.0**	**15.7**	**-2.6**
Services	**7.8**	**-1.4**	**7.9**	**3.8**	**11.6**	**10.3**	**5.8**	**13.8**	**7.8**	**11.0**
Motion picture production & post production	32.1	45.6	4.8	9.6	6.6	*	*	*	*	*
Telecommunications	-0.8	0.2	3.7	-3.3	13.6	*	*	*	*	*
Engineering services	0.0	-17.0	5.6	9.0	-2.2	-0.2	6.7	26.7	21.5	10.7
Computer and related services	35.5	7.5	17.4	10.8	7.3	*	*	*	*	5.3
Other services	48.9	-16.9	26.0	16.8	71.1	3.6	31.8	10.3	9.3	6.3
High Technology Sector Total	**6.5**	**2.2**	**12.6**	**0.5**	**6.6**	**9.2**	**6.2**	**11.3**	**8.7**	**9.4**
BC Industrial Aggregate	**1.3**	**4.6**	**9.0**	**1.7**	**3.2**	**5.1**	**8.2**	**7.6**	**6.6**	**5.5**

1. Industry-based GDP data are now reported at basic prices. Previously a "factor cost" method of calculation was used. The difference between the basic price and factor cost concepts is that the factor cost estimate includes all subsidies and excludes all indirect taxes.

* Data has been suppressed due to confidentiality requirements.

r Revised

p Preliminary

Source: BC Stats and Statistics Canada

Table 3. Gross Domestic Product (GDP) at basic prices,[1] Selected Activities, 1997-2007

Chained (2002 $ million)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Goods-producing industries	**28,432**	**27,811**	**29,145**	**31,322**	**30,714**	**31,664**	**32,429**	**35,026**	**36,925**	**38,064**	**37,755**
Agriculture, forestry, fishing and hunting	4,660	4,575	4,424	4,359	4,474	4,430	4,500	4,830	4,945	4,941	4,686
Crop and animal production	954	909	979	975	1,141	1,058	1,053	1,044	1,093	1,057	1,113
Forestry and logging	2,935	2,952	2,789	2,638	2,647	2,713	2,761	3,102	3,191	3,272	3,018
Fishing, hunting and trapping	235	153	118	135	111	134	130	151	128	135	120
Support activities for agriculture and forestry	554	566	542	626	582	524	556	548	549	516	450
Mining, oil and gas extraction	3,137	3,324	3,329	3,344	4,252	4,383	4,298	4,358	4,450	4,400	4,289
Utilities	2,914	2,991	3,040	3,058	2,389	2,837	2,844	2,827	3,057	3,037	3,297
Construction	6,617	6,101	5,881	5,795	6,021	6,328	6,927	7,673	8,292	9,105	9,431
Manufacturing	11,507	11,255	12,840	14,990	13,667	13,687	13,884	15,008	15,902	16,370	15,872
Food manufacturing	*	*	*	*	*	1,399	1,348	1,386	1,565	1,656	1,638
Wood product manufacturing	3,425	3,373	3,792	4,182	3,432	3,979	4,074	4,743	4,918	4,902	4,426
Pulp and paper manufacturing	*	*	*	*	*	1,453	1,461	1,541	1,530	1,404	1,380
Primary and fabricated metal manufacturing	1,285	*	*	*	*	1,509	1,523	1,711	1,802	2,025	2,054
Computer and electronic product manufacturing	*	*	*	*	*	409	375	538	561	649	646
Service-producing industries	**82,997**	**85,038**	**87,073**	**90,128**	**92,061**	**95,097**	**97,599**	**101,854**	**105,808**	**109,807**	**114,427**
Wholesale trade	4,957	5,355	5,394	5,567	5,656	5,969	6,258	6,616	7,121	7,775	8,320
Retail trade	6,423	6,622	6,764	7,122	7,399	7,597	7,857	8,300	8,648	9,180	9,824
Transportation and warehousing	7,176	7,273	7,575	8,122	7,997	8,072	8,135	8,421	8,920	9,330	9,540
Information and cultural services	3,387	3,582	3,788	4,013	4,108	4,667	4,999	5,029	5,373	5,542	5,726
Finance, insurance, real estate, leasing, etc	24,763	25,076	25,838	26,284	27,019	28,078	28,884	30,037	31,222	32,268	33,795
Professional, scientific and technical services	4,510	5,042	4,952	5,301	5,419	5,550	5,753	6,060	6,197	6,422	6,792
Administration and support, waste mgmt.	2,308	2,348	2,340	2,268	2,370	2,512	2,557	2,796	3,015	3,120	3,320
Education	6,088	6,293	6,479	6,630	6,733	6,781	6,922	7,066	7,174	7,329	7,565
Health care and social assistance	8,570	8,622	8,707	9,156	9,359	9,410	9,554	9,242	9,313	9,464	9,572
Arts, entertainment and recreation	1,352	1,347	1,454	1,467	1,537	1,567	1,555	1,614	1,662	1,786	1,872
Accommodation and food services	3,881	3,848	3,825	3,920	3,899	3,944	3,984	4,207	4,400	4,612	4,665
Other services	3,178	3,140	3,217	3,402	3,655	3,823	3,949	4,122	4,163	4,295	4,426
Public administration	6,277	6,339	6,588	6,790	6,919	7,128	7,188	7,263	7,463	7,522	7,797
GDP at basic prices	**111,554**	**112,913**	**116,307**	**121,546**	**122,848**	**126,761**	**130,026**	**135,396**	**141,216**	**146,284**	**150,442**

% change from previous year

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Goods-producing industries	**-2.2**	**4.8**	**7.5**	**-1.9**	**3.1**	**2.4**	**8.0**	**5.4**	**3.1**	**-0.8**
Agriculture, forestry, fishing and hunting	-1.8	-3.3	-1.5	2.6	-1.0	1.6	7.3	2.4	-0.1	-5.2
Crop and animal production	-4.8	7.7	-0.4	17.0	-7.3	-0.4	-0.9	4.7	-3.3	5.3
Forestry and logging	0.6	-5.5	-5.4	0.3	2.5	1.8	12.3	2.9	2.5	-7.8
Fishing, hunting and trapping	-35.1	-23.0	14.6	-17.5	21.0	-3.0	15.5	-14.9	5.3	-11.2
Support activities for agriculture and forestry	2.1	-4.2	15.5	-7.0	-10.0	6.0	-1.3	0.2	-6.1	-12.8
Mining, oil and gas extraction	6.0	0.2	0.5	27.1	3.1	-1.9	1.4	2.1	-1.1	-2.5
Utilities	2.6	1.7	0.6	-21.9	18.7	0.3	-0.6	8.1	-0.7	8.6
Construction	-7.8	-3.6	-1.5	3.9	5.1	9.5	10.8	8.1	9.8	3.6
Manufacturing	-2.2	14.1	16.7	-8.8	0.1	1.4	8.1	6.0	2.9	-3.0
Food manufacturing	*	*	*	*	*	-3.6	2.8	12.9	5.8	-1.1
Wood product manufacturing	-1.5	12.4	10.3	-17.9	15.9	2.4	16.4	3.7	-0.3	-9.7
Pulp and paper manufacturing	*	*	*	*	*	0.6	5.4	-0.7	-8.3	-1.7
Primary and fabricated metal manufacturing	*	*	*	*	*	0.9	12.3	5.3	12.3	1.4
Computer and electronic product manufacturing	*	*	*	*	*	-8.2	43.4	4.2	15.8	-0.5
Service-producing industries	**2.5**	**2.4**	**3.5**	**2.1**	**3.3**	**2.6**	**4.4**	**3.9**	**3.8**	**4.2**
Wholesale trade	8.0	0.7	3.2	1.6	5.5	4.8	5.7	7.6	9.2	7.0
Retail trade	3.1	2.1	5.3	3.9	2.7	3.4	5.6	4.2	6.2	7.0
Transportation and warehousing	1.4	4.1	7.2	-1.5	0.9	0.8	3.5	5.9	4.6	2.3
Information and cultural services	5.8	5.7	5.9	2.4	13.6	7.1	0.6	6.9	3.1	3.3
Finance, insurance, real estate, leasing, etc	1.3	3.0	1.7	2.8	3.9	2.9	4.0	3.9	3.3	4.7
Professional, scientific and technical services	11.8	-1.8	7.0	2.2	2.4	3.7	5.3	2.3	3.6	5.8
Administration and support, waste mgmt.	1.7	-0.3	-3.1	4.5	6.0	1.8	9.4	7.9	3.5	6.4
Education	3.4	2.9	2.3	1.6	0.7	2.1	2.1	1.5	2.2	3.2
Health care and social assistance	0.6	1.0	5.2	2.2	0.6	1.5	-3.3	0.8	1.6	1.1
Arts, entertainment and recreation	-0.4	7.9	0.9	4.8	1.9	-0.8	3.8	3.0	7.4	4.9
Accommodation and food services	-0.9	-0.6	2.5	-0.5	1.2	1.0	5.6	4.6	4.8	1.2
Other services	-1.2	2.4	5.7	7.5	4.6	3.3	4.4	1.0	3.2	3.1
Public administration	1.0	3.9	3.1	1.9	3.0	0.8	1.0	2.8	0.8	3.6
GDP at basic prices	**1.2**	**3.0**	**4.5**	**1.1**	**3.2**	**2.6**	**4.1**	**4.3**	**3.6**	**2.8**

1. Industry-based GDP data are now reported at basic prices. Previously a "factor cost" method of calculation was used. The difference between the basic price and factor cost concepts is that the factor cost estimate includes all subsidies and excludes all indirect taxes.

* Data has been suppressed due to confidentiality requirements.

Source: Statistics Canada

Table 4. High Technology GDP (Constant Dollar) at Basic Prices,[1] by Province, 1997-2007

2002 $ million

Province		1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Canada	Manufacturing	16,490	17,544	22,201	26,706	22,826	20,398	20,214	20,600	21,475	22,399	22,941
	Services	30,198	34,230	39,416	43,356	47,054	50,118	52,549	54,835	57,356	60,675	62,104
	Total	46,598	51,681	61,488	69,900	69,836	70,516	72,759	75,431	78,830	83,091	85,061
British Columbia	Manufacturing	560	605	759	1,250	1,093	908	894	1,012	1,004	1,148	1,129
	Services	3,996	4,319	4,570	4,982	5,208	5,822	6,230	6,447	7,275	7,883	8,180
	Total	4,519	4,884	5,302	6,235	6,302	6,730	7,124	7,458	8,287	9,035	9,319
Alberta	Manufacturing	901	1,055	1,052	1,115	801	866	728	858	880	1,028	1,076
	Services	4,087	4,823	5,132	5,572	6,080	6,514	6,972	7,377	8,093	9,100	9,416
	Total	5,054	5,956	6,266	6,771	6,881	7,380	7,700	8,235	8,975	10,130	10,492
Ontario	Manufacturing	7,437	8,061	9,612	11,022	9,592	9,193	9,060	10,017	9,426	9,429	9,727
	Services	12,247	13,891	17,156	19,623	21,371	22,288	23,288	24,668	25,451	27,144	27,659
	Total	19,660	21,906	26,705	30,577	30,954	31,481	32,347	34,678	34,896	36,576	37,400
Quebec	Manufacturing	6,534	6,721	9,566	12,048	10,193	8,425	8,308	7,785	8,795	9,254	9,279
	Services	6,736	7,672	8,788	9,150	10,026	10,766	11,189	11,557	11,818	12,284	12,467
	Total	13,212	14,359	18,278	21,123	20,194	19,191	19,494	19,306	20,588	21,506	21,724

% change from previous year

Province		1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Canada	Manufacturing	6.4	26.5	20.3	-14.5	-10.6	-0.9	1.9	4.2	4.3	2.4
	Services	13.4	15.2	10.0	8.5	6.5	4.9	4.3	4.6	5.8	2.4
	Total	10.9	19.0	13.7	-0.1	1.0	3.2	3.7	4.5	5.4	2.4
British Columbia	Manufacturing	8.0	25.6	64.7	-12.6	-16.9	-1.5	13.2	-0.8	14.4	-1.7
	Services	8.1	5.8	9.0	4.5	11.8	7.0	3.5	12.8	8.4	3.8
	Total	8.1	8.6	17.6	1.1	6.8	5.9	4.7	11.1	9.0	3.1
Alberta	Manufacturing	17.1	-0.3	6.0	-28.1	8.1	-15.9	17.8	2.6	16.8	4.6
	Services	18.0	6.4	8.6	9.1	7.1	7.0	5.8	9.7	12.4	3.5
	Total	17.9	5.2	8.0	1.6	7.2	4.3	6.9	9.0	12.9	3.6
Ontario	Manufacturing	8.4	19.2	14.7	-13.0	-4.2	-1.4	10.6	-5.9	0.0	3.2
	Services	13.4	23.5	14.4	8.9	4.3	4.5	5.9	3.2	6.7	1.9
	Total	11.4	21.9	14.5	1.2	1.7	2.8	7.2	0.6	4.8	2.3
Quebec	Manufacturing	2.9	42.3	25.9	-15.4	-17.3	-1.4	-6.3	13.0	5.2	0.3
	Services	13.9	14.6	4.1	9.6	7.4	3.9	3.3	2.3	3.9	1.5
	Total	8.7	27.3	15.6	-4.4	-5.0	1.6	-1.0	6.6	4.5	1.0

1. Industry-based GDP data are now reported at basic prices. Previously a "factor cost" method of calculation was used. The difference between the basic price and factor cost concepts is that the factor cost estimate includes all subsidies and excludes all indirect taxes.

[r] Revised

[p] Preliminary

Source: BC Stats

Table 5. High Technology GDP (Current Dollar) at Basic Prices,[1] by Province and the USA, 1997-2007

Cdn $ million

Region		1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Canada	Manufacturing	18,009	18,107	22,751	26,042	21,960	20,398	20,773	21,129	21,063	22,197	22,758
	Services	32,385	36,675	40,146	43,372	46,757	50,118	53,410	57,089	60,835	65,407	67,801
	Total	50,394	54,782	62,897	69,413	68,716	70,516	74,184	78,218	81,898	87,604	90,559
British Columbia	Manufacturing	743	734	920	1,254	1,096	908	925	1,007	956	1,106	1,077
	Services	4,380	4,720	4,656	5,026	5,216	5,822	6,422	6,798	7,734	8,339	9,258
	Total	5,123	5,454	5,576	6,280	6,311	6,730	7,347	7,805	8,690	9,445	10,335
Alberta	Manufacturing	908	1,063	1,122	1,538	923	866	756	933	903	890	819
	Services	4,305	5,079	5,313	5,564	6,102	6,514	7,209	7,766	8,804	10,314	10,658
	Total	5,213	6,143	6,435	7,102	7,025	7,380	7,965	8,699	9,708	11,204	11,477
Ontario	Manufacturing	8,765	9,064	9,595	10,342	9,281	9,193	9,225	9,352	9,556	10,686	11,783
	Services	12,969	14,702	17,370	19,525	21,177	22,288	23,542	25,656	26,547	28,025	28,894
	Total	21,734	23,767	26,965	29,867	30,458	31,481	32,767	35,008	36,103	38,711	40,677
Quebec	Manufacturing	6,680	6,330	10,081	11,759	9,647	8,425	8,603	8,615	8,300	8,073	7,921
	Services	7,143	8,157	8,794	9,115	9,867	10,766	11,213	11,463	11,881	12,503	12,993
	Total	13,823	14,487	18,875	20,873	19,514	19,191	19,816	20,078	20,181	20,576	20,914
United States[2]	Manufacturing	413,573	490,112	493,341	531,017	499,841	491,976	442,755	424,396	415,005	415,252	404,979
	Services	669,961	809,337	912,574	991,365	1,078,617	1,111,584	1,008,056	1,009,593	1,019,005	1,024,099	1,038,505
	Total	1,083,533	1,299,449	1,405,916	1,522,382	1,578,458	1,603,560	1,450,811	1,433,989	1,434,010	1,439,351	1,443,484

% change from previous year

Region		1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Canada	Manufacturing	0.5	25.7	14.5	-15.7	-7.1	1.8	1.7	-0.3	5.4	2.5
	Services	13.2	9.5	8.0	7.8	7.2	6.6	6.9	6.6	7.5	3.7
	Total	8.7	14.8	10.4	-1.0	2.6	5.2	5.4	4.7	7.0	3.4
British Columbia	Manufacturing	-1.2	25.3	36.4	-12.6	-17.2	1.9	8.9	-5.0	15.7	-2.6
	Services	7.8	-1.4	7.9	3.8	11.6	10.3	5.8	13.8	7.8	11.0
	Total	6.5	2.2	12.6	0.5	6.6	9.2	6.2	11.3	8.7	9.4
Alberta	Manufacturing	17.1	5.5	37.2	-40.0	-6.1	-12.7	23.4	-3.2	-1.4	-8.0
	Services	18.0	4.6	4.7	9.7	6.7	10.7	7.7	13.4	17.1	3.3
	Total	17.8	4.8	10.4	-1.1	5.1	7.9	9.2	11.6	15.4	2.4
Ontario	Manufacturing	3.4	5.9	7.8	-10.3	-0.9	0.3	1.4	2.2	11.8	10.3
	Services	13.4	18.1	12.4	8.5	5.2	5.6	9.0	3.5	5.6	3.1
	Total	9.4	13.5	10.8	2.0	3.4	4.1	6.8	3.1	7.2	5.1
Quebec	Manufacturing	-5.2	59.3	16.6	-18.0	-12.7	2.1	0.1	-3.7	-2.7	-1.9
	Services	14.2	7.8	3.6	8.2	9.1	4.1	2.2	3.6	5.2	3.9
	Total	4.8	30.3	10.6	-6.5	-1.7	3.3	1.3	0.5	2.0	1.6
United States	Manufacturing	18.5	0.7	7.6	-5.9	-1.6	-10.0	-4.1	-2.2	0.1	-2.5
	Services	20.8	12.8	8.6	8.8	3.1	-9.3	0.2	0.9	0.5	1.4
	Total	19.9	8.2	8.3	3.7	1.6	-9.5	-1.2	0.0	0.4	0.3

1. Industry-based GDP data are now reported at basic prices. Previously a "factor cost" method of calculation was used. The difference between the basic price and factor cost concepts is that the factor cost estimate includes all subsidies and excludes all indirect taxes.
2. Figures for the United States were converted from U.S. dollar data using an average annual exchange rate.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 6. High Technology GDP (current dollar) for Selected States,[1] 1997-2007

Value ($Cdn million)[2]

State	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
USA	1,083,533	1,299,449	1,405,916	1,522,382	1,578,458	1,603,560	1,450,811	1,433,989	1,434,010	1,439,351	1,443,484
California	179,043	217,259	260,409	300,189	284,232	271,329	244,895	244,103	248,623	248,520	na
Texas	88,886	107,835	107,029	113,781	118,486	120,802	103,249	107,093	108,631	111,651	na
New York	62,332	77,116	80,205	86,783	93,664	99,871	90,738	93,215	93,399	95,008	na
Florida	39,055	45,034	47,734	51,791	55,316	58,142	52,360	54,791	55,313	55,042	na
Virginia	33,688	41,918	44,217	49,390	54,589	55,171	52,847	53,849	53,798	53,616	na
Massachusetts	38,911	46,136	50,367	61,054	61,629	62,919	57,756	52,847	51,452	52,544	na
Pennsylvania	46,346	53,172	56,433	57,246	66,898	69,795	62,167	54,522	52,717	52,504	na
New Jersey	47,350	53,172	57,404	58,558	66,634	65,731	59,244	54,259	51,857	52,860	na
Illinois	40,403	45,605	48,789	49,769	52,154	53,714	47,205	46,931	45,856	45,203	na
Washington	26,648	38,358	52,772	52,277	53,268	52,496	47,345	48,273	50,778	50,043	na
Ohio	28,696	33,925	36,059	36,989	38,301	37,183	33,254	32,907	32,686	32,193	na
Georgia	29,842	36,792	40,045	42,632	44,117	44,527	38,643	37,765	37,636	37,892	na
North Carolina	32,033	35,624	40,876	39,356	43,223	47,048	44,109	37,663	39,635	42,609	na
Michigan	26,434	30,545	33,364	34,539	36,217	37,484	32,923	28,624	28,831	27,670	na
Maryland	21,785	24,833	25,231	27,028	30,503	32,764	30,066	30,037	30,488	30,519	na
Colorado	27,035	32,943	37,971	44,391	43,957	44,811	38,333	36,900	36,653	37,838	na
Minnesota	16,400	19,244	20,428	21,277	22,368	24,676	22,807	22,089	22,395	21,738	na
Arizona	25,213	29,959	32,633	32,807	35,212	33,991	32,081	25,822	24,513	25,065	na
Connecticut	20,179	24,145	23,879	26,243	29,497	27,862	23,184	23,894	23,355	24,854	na
Missouri	17,558	19,444	18,968	20,646	21,406	23,068	21,616	21,222	20,470	18,628	na
Other States	315,046	379,181	387,010	416,607	435,269	449,775	415,676	420,210	415,657	413,638	na

% change from previous year

State	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
USA	19.9	8.2	8.3	3.7	1.6	-9.5	-1.2	0.0	0.4	0.3
California	21.3	19.9	15.3	-5.3	-4.5	-9.7	-0.3	1.9	0.0	na
Texas	21.3	-0.7	6.3	4.1	2.0	-14.5	3.7	1.4	2.8	na
New York	23.7	4.0	8.2	7.9	6.6	-9.1	2.7	0.2	1.7	na
Florida	15.3	6.0	8.5	6.8	5.1	-9.9	4.6	1.0	-0.5	na
Virginia	24.4	5.5	11.7	10.5	1.1	-4.2	1.9	-0.1	-0.3	na
Massachusetts	18.6	9.2	21.2	0.9	2.1	-8.2	-8.5	-2.6	2.1	na
Pennsylvania	14.7	6.1	1.4	16.9	4.3	-10.9	-12.3	-3.3	-0.4	na
New Jersey	12.3	8.0	2.0	13.8	-1.4	-9.9	-8.4	-4.4	1.9	na
Illinois	12.9	7.0	2.0	4.8	3.0	-12.1	-0.6	-2.3	-1.4	na
Washington	43.9	37.6	-0.9	1.9	-1.5	-9.8	2.0	5.2	-1.4	na
Ohio	18.2	6.3	2.6	3.5	-2.9	-10.6	-1.0	-0.7	-1.5	na
Georgia	23.3	8.8	6.5	3.5	0.9	-13.2	-2.3	-0.3	0.7	na
North Carolina	11.2	14.7	-3.7	9.8	8.8	-6.2	-14.6	5.2	7.5	na
Michigan	15.6	9.2	3.5	4.9	3.5	-12.2	-13.1	0.7	-4.0	na
Maryland	14.0	1.6	7.1	12.9	7.4	-8.2	-0.1	1.5	0.1	na
Colorado	21.9	15.3	16.9	-1.0	1.9	-14.5	-3.7	-0.7	3.2	na
Minnesota	17.3	6.2	4.2	5.1	10.3	-7.6	-3.1	1.4	-2.9	na
Arizona	18.8	8.9	0.5	7.3	-3.5	-5.6	-19.5	-5.1	2.3	na
Connecticut	19.7	-1.1	9.9	12.4	-5.5	-16.8	3.1	-2.3	6.4	na
Missouri	10.7	-2.4	8.8	3.7	7.8	-6.3	-1.8	-3.5	-9.0	na
Other States	20.4	2.1	7.6	4.5	3.3	-7.6	1.1	-1.1	-0.5	na

1. Top 20 states by employment.
2. Figures converted from U.S. dollar data using an average annual exchange rate.
na denotes data not available

[r] Revised
[p] Preliminary

Source: BC Stats

Table 7. High Technology Sector Revenues,[1] 1997-2007

$ million

INDUSTRY	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Manufacturing	**1,763**	**1,845**	**2,267**	**2,819**	**2,524**	**2,224**	**2,464**	**2,548**	**2,404**	**2,741**	**2,622**
Services	**7,248**	**7,941**	**8,563**	**8,963**	**8,947**	**10,021**	**10,859**	**11,453**	**13,000**	**13,965**	**15,480**
Motion picture production & post production	140	217	496	415	428	496	665	454	654	710	800
Telecommunications	3,797	4,300	4,379	4,541	4,108	4,554	4,908	4,771	5,187	5,181	5,970
Engineering services	1,678	1,281	1,154	1,142	1,439	1,415	1,513	1,565	1,983	2,408	2,665
Software publishing	250	622	632	711	816	818	798	1,165	1,186	1,277	1,453
Other computer and related services	1,105	1,217	1,579	1,769	1,717	1,817	2,101	2,384	2,765	3,056	3,178
Other services	278	305	322	385	440	922	874	1,115	1,226	1,333	1,415
High Technology Sector Total	**9,010**	**9,786**	**10,829**	**11,782**	**11,471**	**12,245**	**13,323**	**14,001**	**15,404**	**16,706**	**18,103**

% change from previous year

INDUSTRY	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Manufacturing	**4.7**	**22.9**	**24.4**	**-10.4**	**-11.9**	**10.8**	**3.4**	**-5.7**	**14.0**	**-4.3**
Services	**9.6**	**7.8**	**4.7**	**-0.2**	**12.0**	**8.4**	**5.5**	**13.5**	**7.4**	**10.8**
Motion picture production & post production	54.7	128.7	-16.4	3.2	16.0	33.9	-31.7	44.1	8.5	12.7
Telecommunications	13.2	1.8	3.7	-9.5	10.9	7.8	-2.8	8.7	-0.1	15.2
Engineering services	-23.7	-9.9	-1.1	26.0	-1.7	6.9	3.4	26.7	21.5	10.7
Software publishing	148.8	1.6	12.4	14.8	0.2	-2.4	45.9	1.8	7.7	13.8
Other computer and related services	10.2	29.7	12.1	-3.0	5.8	15.6	13.5	16.0	10.5	4.0
Other services	9.6	5.7	19.5	14.1	109.7	-5.2	27.5	10.0	8.8	6.1
High Technology Sector Total	**8.6**	**10.7**	**8.8**	**-2.6**	**6.7**	**8.8**	**5.1**	**10.0**	**8.5**	**8.4**

1. Note that revenues for the service industries are collected on a company rather than an establishment basis. As a result, revenues for those industries represent the entire Canadian earnings of companies headquartered in BC. Totals are calculated using unrounded data.

[r] Revised
[p] Preliminary

Source: BC Stats and Statistics Canada

Table 8. High Technology Sector Revenues, by Province and the USA, 1997-2007

Cdn $ million

Region	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Canada	97,187	112,127	125,767	147,457	146,032	144,065	144,445	150,991	155,700	165,056	170,032
British Columbia	9,010	9,786	10,829	11,782	11,471	12,245	13,323	14,001	15,404	16,706	18,103
Alberta	9,153	10,830	11,023	13,111	14,191	13,276	13,931	15,137	16,361	18,351	18,324
Ontario	43,720	50,504	55,779	65,408	66,487	64,577	62,080	66,880	68,694	73,483	77,216
Quebec	28,241	32,571	39,184	47,194	43,251	42,772	42,790	42,372	41,890	42,144	42,750
United States[1]	2,019,841	2,379,187	2,575,813	2,800,495	2,885,090	2,831,446	2,538,686	2,476,078	2,465,676	2,458,573	2,486,502

% change from previous year

Region	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Canada	15.4	12.2	17.2	-1.0	-1.3	0.3	4.5	3.1	6.0	3.0
British Columbia	8.6	10.7	8.8	-2.6	6.7	8.8	5.1	10.0	8.5	8.4
Alberta	18.3	1.8	18.9	8.2	-6.4	4.9	8.7	8.1	12.2	-0.1
Ontario	15.5	10.4	17.3	1.6	-2.9	-3.9	7.7	2.7	7.0	5.1
Quebec	15.3	20.3	20.4	-8.4	-1.1	0.0	-1.0	-1.1	0.6	1.4
United States	17.8	8.3	8.7	3.0	-1.9	-10.3	-2.5	-0.4	-0.3	1.1

1. Figures for the United States were converted from U.S. dollar data using an average annual exchange rate.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 9. High Technology Sector Revenues for Selected States,[1] 1997-2007

Value ($Cdn million)[2]

State	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
USA	2,019,841	2,379,187	2,575,813	2,800,495	2,885,090	2,831,446	2,538,686	2,476,078	2,465,676	2,458,573	2,486,502
California	375,725	452,617	494,698	534,159	548,402	507,152	454,268	432,969	436,777	430,989	na
Texas	162,994	181,438	210,619	239,717	232,882	229,296	206,671	203,301	203,819	205,610	na
New York	116,938	137,441	144,525	160,204	161,783	162,006	147,556	146,110	146,790	147,004	na
Florida	72,631	83,969	93,846	103,043	107,838	109,966	98,757	97,884	96,466	95,333	na
Virginia	63,795	79,321	89,665	101,377	109,651	109,169	96,683	98,079	91,553	91,714	na
Massachusetts	80,885	94,858	102,452	112,193	114,965	115,776	104,587	98,567	94,349	95,728	na
Pennsylvania	79,257	91,985	98,221	110,846	118,863	119,942	105,259	101,407	100,167	98,870	na
New Jersey	71,667	83,845	96,167	102,293	114,536	118,566	104,219	97,505	96,494	95,990	na
Illinois	80,392	91,525	95,683	106,907	103,103	97,530	86,850	87,276	81,984	82,544	na
Washington	40,681	62,326	79,382	88,149	106,108	108,456	100,733	95,928	103,122	109,242	na
Ohio	56,981	67,892	70,961	78,634	79,691	73,991	64,951	63,737	64,589	63,298	na
Georgia	52,069	62,871	72,687	79,213	83,940	85,560	75,861	74,368	72,430	71,544	na
North Carolina	65,928	71,771	78,508	79,179	78,848	78,134	72,211	67,130	73,896	80,117	na
Michigan	41,748	47,492	53,420	57,372	56,888	55,369	49,462	45,974	45,720	45,240	na
Maryland	35,363	43,016	46,199	51,387	55,943	57,024	51,992	50,531	51,632	51,902	na
Colorado	48,168	54,977	60,634	66,290	68,032	70,269	61,660	58,624	58,248	58,583	na
Minnesota	34,960	40,504	42,523	46,869	49,130	49,256	44,977	42,514	44,028	43,410	na
Arizona	45,442	51,085	57,616	59,277	56,478	58,521	56,499	48,167	43,860	47,069	na
Connecticut	38,456	43,643	43,291	46,608	52,329	49,099	41,523	40,152	40,047	41,604	na
Missouri	31,552	36,703	39,136	41,098	44,395	46,869	43,958	42,137	40,181	36,872	na
Other States	574,620	671,842	688,146	729,531	743,618	733,239	656,967	656,689	647,640	634,864	na

% change from previous year

State	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
USA	17.8	8.3	8.7	3.0	-1.9	-10.3	-2.5	-0.4	-0.3	1.1
California	20.5	9.3	8.0	2.7	-7.5	-10.4	-4.7	0.9	-1.3	na
Texas	11.3	16.1	13.8	-2.9	-1.5	-9.9	-1.6	0.3	0.9	na
New York	17.5	5.2	10.8	1.0	0.1	-8.9	-1.0	0.5	0.1	na
Florida	15.6	11.8	9.8	4.7	2.0	-10.2	-0.9	-1.4	-1.2	na
Virginia	24.3	13.0	13.1	8.2	-0.4	-11.4	1.4	-6.7	0.2	na
Massachusetts	17.3	8.0	9.5	2.5	0.7	-9.7	-5.8	-4.3	1.5	na
Pennsylvania	16.1	6.8	12.9	7.2	0.9	-12.2	-3.7	-1.2	-1.3	na
New Jersey	17.0	14.7	6.4	12.0	3.5	-12.1	-6.4	-1.0	-0.5	na
Illinois	13.8	4.5	11.7	-3.6	-5.4	-11.0	0.5	-6.1	0.7	na
Washington	53.2	27.4	11.0	20.4	2.2	-7.1	-4.8	7.5	5.9	na
Ohio	19.1	4.5	10.8	1.3	-7.2	-12.2	-1.9	1.3	-2.0	na
Georgia	20.7	15.6	9.0	6.0	1.9	-11.3	-2.0	-2.6	-1.2	na
North Carolina	8.9	9.4	0.9	-0.4	-0.9	-7.6	-7.0	10.1	8.4	na
Michigan	13.8	12.5	7.4	-0.8	-2.7	-10.7	-7.1	-0.6	-1.0	na
Maryland	21.6	7.4	11.2	8.9	1.9	-8.8	-2.8	2.2	0.5	na
Colorado	14.1	10.3	9.3	2.6	3.3	-12.3	-4.9	-0.6	0.6	na
Minnesota	15.9	5.0	10.2	4.8	0.3	-8.7	-5.5	3.6	-1.4	na
Arizona	12.4	12.8	2.9	-4.7	3.6	-3.5	-14.7	-8.9	7.3	na
Connecticut	13.5	-0.8	7.7	12.3	-6.2	-15.4	-3.3	-0.3	3.9	na
Missouri	16.3	6.6	5.0	8.0	5.6	-6.2	-4.1	-4.6	-8.2	na
Other States	16.9	2.4	6.0	1.9	-1.4	-10.4	0.0	-1.4	-2.0	na

1. Top 20 states by employment.
2. Figures converted from U.S. dollar data using an average annual exchange rate.
na denotes data not available

r Revised
p Preliminary

Source: BC Stats

Table 10. High Technology Sector Employment,[1] 1997-2007

INDUSTRY	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Manufacturing Industries	**10,790**	**11,230**	**13,620**	**15,040**	**15,180**	**13,830**	**12,590**	**12,160**	**13,280**	**14,480**	**14,610**
Service Industries	**45,960**	**44,930**	**48,110**	**52,030**	**56,410**	**53,280**	**53,360**	**55,850**	**57,860**	**62,960**	**66,530**
Motion picture production & post production	1,540	2,390	3,740	3,090	3,240	4,840	4,000	4,980	5,320	5,620	6,030
Telecommunications	16,340	15,940	15,320	15,850	15,770	12,570	11,250	12,790	12,000	13,260	13,850
Engineering services	12,770	10,070	9,900	9,300	10,100	9,300	9,110	9,500	9,930	11,020	11,850
Software publishing	1,920	2,100	2,540	3,200	3,670	4,070	4,730	5,490	7,090	7,390	8,160
Other computer and related services	9,060	9,920	12,050	15,350	17,110	17,070	18,470	17,160	17,000	17,960	18,620
Other services	4,350	4,520	4,570	5,240	6,520	5,430	5,800	5,940	6,520	7,710	8,020
High Technology Sector Total	**56,750**	**56,160**	**61,730**	**67,070**	**71,580**	**67,110**	**65,950**	**68,010**	**71,140**	**77,440**	**81,140**
BC Industrial Aggregate	**1,497,860**	**1,509,640**	**1,512,490**	**1,572,710**	**1,607,020**	**1,613,270**	**1,656,520**	**1,699,540**	**1,756,120**	**1,832,290**	**1,888,940**

% change from previous year

INDUSTRY	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Manufacturing Industries	**4.1**	**21.3**	**10.5**	**0.9**	**-8.9**	**-9.0**	**-3.4**	**9.2**	**9.0**	**0.9**
Service Industries	**-2.3**	**7.1**	**8.1**	**8.4**	**-5.5**	**0.1**	**4.7**	**3.6**	**8.8**	**5.7**
Motion picture production & post production	55.1	56.9	-17.3	4.6	49.6	-17.5	24.6	6.9	5.6	7.3
Telecommunications	-2.4	-3.9	3.5	-0.5	-20.3	-10.5	13.6	-6.2	10.5	4.5
Engineering services	-21.1	-1.7	-6.1	8.6	-7.9	-2.1	4.3	4.6	11.0	7.6
Software publishing	9.5	20.8	26.1	14.9	10.7	16.3	16.0	29.2	4.3	10.3
Other computer and related services	9.5	21.5	27.4	11.5	-0.2	8.2	-7.1	-0.9	5.6	3.7
Other services	3.8	1.2	14.6	24.5	-16.8	6.8	2.5	9.8	18.3	3.9
High Technology Sector Total	**-1.0**	**9.9**	**8.6**	**6.7**	**-6.2**	**-1.7**	**3.1**	**4.6**	**8.9**	**4.8**
BC Industrial Aggregate	**0.8**	**0.2**	**4.0**	**2.2**	**0.4**	**2.7**	**2.6**	**3.3**	**4.3**	**3.1**

1. Totals and percent changes are calculated using unrounded data.

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

Table 11. Employment by Industry,[1] British Columbia, 1997-2007

Persons (thousands)

	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007
Goods Producing Industries	**308.5**	**301.2**	**301.8**	**314.7**	**297.5**	**289.3**	**291.1**	**301.5**	**311.5**	**326.7**	**335.7**
Agriculture and Related	na	na	na	na	na	na	na	na	na	na	na
Fishing and Related	na	na	na	na	na	na	na	na	na	na	na
Forestry and Related	79.4	73.6	76.8	80.5	70.0	65.3	66.7	67.5	64.7	61.4	60.6
Logging and Forestry	*19.7*	*17.6*	*17.8*	*18.3*	*17.4*	*17.0*	*17.1*	*17.8*	*16.5*	*15.0*	*14.7*
Paper and Allied Products	*16.6*	*16.6*	*17.8*	*18.8*	*15.0*	*11.6*	*13.6*	*13.2*	*12.3*	*12.2*	*11.9*
Wood Manufacturing	*43.1*	*39.4*	*41.2*	*43.4*	*37.6*	*36.7*	*36.0*	*36.5*	*35.9*	*34.2*	*33.9*
Mining and Oil and Gas Extraction	12.8	13.0	10.7	10.6	10.6	10.4	10.6	11.7	12.8	13.8	15.1
Other Manufacturing	83.1	87.6	91.3	98.8	95.3	91.8	88.9	89.5	92.6	100.7	100.2
Construction	80.0	77.2	72.6	74.3	73.7	76.5	79.4	87.5	96.0	107.9	119.0
Utilities	8.6	8.4	9.1	9.4	9.2	9.3	8.6	8.7	9.3	9.7	10.0
Service Producing Industries	**1,184.3**	**1,199.2**	**1,200.8**	**1,251.5**	**1,298.2**	**1,315.2**	**1,351.2**	**1,374.1**	**1,407.6**	**1,474.8**	**1,521.4**
Retail and Wholesale Trade	255.7	257.6	258.5	271.1	282.2	292.8	306.6	316.6	326.7	337.8	354.4
Transportation and Warehousing	85.1	86.4	84.5	84.5	87.6	87.2	88.8	89.1	89.8	92.9	94.1
Information and Culture	34.5	35.0	34.5	36.3	37.2	37.2	37.8	38.0	38.0	41.9	44.3
Finance, Insurance and Real Estate	99.0	99.7	97.9	101.6	99.0	99.2	98.0	98.3	101.2	105.7	108.0
Professional, Scientific and Technical	68.9	72.4	74.3	82.0	84.9	81.3	83.6	83.8	86.1	92.4	95.7
Educational	121.5	122.2	123.6	127.7	125.8	127.1	125.5	127.6	129.9	135.7	139.1
Health and Social	155.7	162.9	167.9	174.5	178.3	185.5	198.6	196.7	199.5	207.9	210.8
Arts, Entertainment and Recreation	29.5	27.3	24.7	26.5	29.6	30.0	30.9	33.1	33.3	35.5	36.5
Accommodation, and Food	137.3	139.0	139.3	144.8	149.5	151.6	155.5	157.3	161.8	170.3	176.9
Public Administration	76.1	76.6	74.7	74.1	83.7	82.8	84.2	83.8	85.2	88.1	90.1
Other Services	121.1	120.1	120.8	128.5	140.0	140.5	141.7	149.7	156.1	166.6	171.5
BC Industrial Aggregate	**1,497.9**	**1,509.6**	**1,512.5**	**1,572.7**	**1,607.0**	**1,613.3**	**1,656.5**	**1,699.5**	**1,756.1**	**1,832.3**	**1,888.9**
High Technology Sector Total	**56.8**	**56.2**	**61.7**	**67.1**	**71.6**	**67.1**	**66.0**	**68.0**	**71.1**	**77.4**	**81.1**

% change from previous year

	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007
Goods Producing Industries	**-2.4**	**0.2**	**4.3**	**-5.5**	**-2.8**	**0.6**	**3.6**	**3.3**	**4.9**	**2.7**
Agriculture and Related	na	na	na	na	na	na	na	na	na	na
Fishing and Related	na	na	na	na	na	na	na	na	na	na
Forestry and Related	-7.2	4.3	4.8	-13.0	-6.6	2.1	1.2	-4.1	-5.1	-1.3
Logging and Forestry	-10.6	0.8	2.9	-5.0	-2.1	0.5	3.9	-7.0	-9.5	-1.4
Paper and Allied Products	0.1	7.1	6.0	-20.2	-22.8	17.4	-2.9	-7.2	-0.2	-2.5
Wood Manufacturing	-8.5	4.7	5.1	-13.3	-2.3	-2.0	1.4	-1.6	-4.8	-0.8
Mining and Oil and Gas Extraction	1.8	-18.0	-0.4	-0.1	-1.7	1.7	10.0	9.7	7.9	9.7
Other Manufacturing	5.5	4.2	8.2	-3.6	-3.6	-3.2	0.6	3.5	8.7	-0.5
Construction	-3.5	-5.9	2.3	-0.9	3.9	3.8	10.2	9.8	12.3	10.3
Utilities	-2.2	8.6	2.7	-1.8	1.1	-7.5	1.0	7.2	4.1	2.9
Service Producing Industries	**1.3**	**0.1**	**4.2**	**3.7**	**1.3**	**2.7**	**1.7**	**2.4**	**4.8**	**3.2**
Retail and Wholesale Trade	0.7	0.4	4.9	4.1	3.7	4.7	3.3	3.2	3.4	4.9
Transportation and Warehousing	1.6	-2.2	-0.1	3.7	-0.5	1.8	0.4	0.8	3.4	1.3
Information and Culture	1.6	-1.5	5.2	2.4	-0.1	1.6	0.7	0.0	10.2	5.7
Finance, Insurance and Real Estate	0.7	-1.8	3.8	-2.5	0.2	-1.2	0.3	3.0	4.4	2.2
Professional, Scientific and Technical	5.0	2.7	10.3	3.6	-4.2	2.8	0.2	2.7	7.4	3.6
Educational	0.6	1.1	3.3	-1.5	1.0	-1.2	1.6	1.8	4.4	2.5
Health and Social	4.7	3.0	3.9	2.2	4.1	7.0	-0.9	1.4	4.2	1.4
Arts, Entertainment and Recreation	-7.3	-9.4	7.0	11.8	1.4	3.0	7.1	0.5	6.8	2.8
Accommodation, and Food	1.3	0.2	4.0	3.2	1.4	2.5	1.2	2.8	5.3	3.9
Public Administration	0.6	-2.4	-0.9	13.0	-1.1	1.7	-0.4	1.6	3.4	2.3
Other Services	-0.8	0.5	6.4	9.0	0.3	0.9	5.6	4.3	6.7	2.9
BC Industrial Aggregate	**0.8**	**0.2**	**4.0**	**2.2**	**0.4**	**2.7**	**2.6**	**3.3**	**4.3**	**3.1**
High Technology Sector Total	**-1.0**	**9.9**	**8.7**	**6.7**	**-6.2**	**-1.7**	**3.1**	**4.6**	**8.9**	**4.8**

1. Totals and percent changes are calculated using unrounded data.

na: Data not available for specific industry.

Source: Statistics Canada and BC Stats

Table 12. High Technology Sector Employment, by Province, 1997-2007

Province	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Canada	569,520	610,370	659,850	710,160	746,140	735,080	727,900	727,640	744,020	772,780	775,160
British Columbia	56,750	56,160	61,730	67,070	71,580	67,110	65,950	68,010	71,140	77,440	81,140
Alberta	52,210	57,370	59,380	62,250	73,440	70,580	69,200	72,300	76,010	86,040	87,730
Ontario	246,310	265,630	286,510	310,860	321,030	319,410	314,840	317,080	319,900	328,250	328,930
Quebec	166,320	178,780	188,420	202,890	211,430	206,230	209,240	205,340	206,870	207,130	204,920

% change from previous year

Province	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Canada	7.2	8.1	7.6	5.1	-1.5	-1.0	0.0	2.3	3.9	0.3
British Columbia	-1.0	9.9	8.6	6.7	-6.2	-1.7	3.1	4.6	8.9	4.8
Alberta	9.9	3.5	4.8	18.0	-3.9	-2.0	4.5	5.1	13.2	2.0
Ontario	7.8	7.9	8.5	3.3	-0.5	-1.4	0.7	0.9	2.6	0.2
Quebec	7.5	5.4	7.7	4.2	-2.5	1.5	-1.9	0.7	0.1	-1.1

[r] Revised
[p] Preliminary
Source: BC Stats

Table 13. High Technology Sector Employment for Top 20 US States, 1997-2007

State	1997	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
USA	7,613,960	7,944,010	8,232,580	8,659,890	8,590,420	7,932,740	7,534,600	7,516,620	7,644,860	7,846,160	7,978,970
California	1,334,330	1,360,150	1,402,470	1,522,770	1,501,260	1,377,790	1,297,570	1,314,200	1,334,520	1,372,650	1,382,890
Texas	563,430	611,560	624,280	665,090	655,550	592,950	565,670	556,330	570,590	590,530	608,890
New York	430,120	450,480	468,830	500,730	495,770	461,550	431,060	425,690	429,170	433,320	437,430
Florida	312,840	331,490	349,270	369,130	372,210	350,200	337,670	345,780	360,270	367,130	365,330
Virginia	239,250	259,530	278,910	307,700	307,500	285,530	278,110	291,930	302,120	312,170	317,690
Massachusetts	315,680	325,230	329,980	357,270	358,790	317,740	295,430	288,400	290,210	296,360	302,840
Pennsylvania	296,730	310,830	322,840	335,870	335,370	310,700	294,520	286,880	288,500	297,480	298,430
New Jersey	291,880	299,130	308,720	318,730	319,800	292,300	276,380	271,130	271,970	281,500	287,520
Illinois	326,380	334,330	329,620	341,680	335,940	305,560	285,040	277,230	278,610	282,310	283,820
Washington	252,020	270,240	265,750	274,430	276,180	251,990	235,180	233,820	244,000	259,610	279,300
Ohio	238,200	247,880	249,450	254,280	248,970	231,420	219,910	210,970	213,150	216,580	220,950
Georgia	212,340	216,180	231,980	245,560	239,240	221,180	215,700	211,410	211,620	214,540	218,500
North Carolina	197,980	206,500	215,050	225,780	227,470	204,940	193,480	193,420	202,210	206,270	212,510
Michigan	238,840	243,150	247,040	255,970	247,090	234,580	225,010	216,740	216,670	214,240	211,980
Maryland	162,940	171,670	179,530	194,240	195,160	190,660	189,000	192,950	198,450	202,750	207,590
Colorado	186,960	206,580	221,970	238,680	237,620	208,550	191,620	188,860	188,210	188,330	191,510
Minnesota	165,800	173,910	177,890	181,350	175,990	165,170	156,110	156,810	160,090	162,510	164,880
Arizona	144,780	153,180	154,990	168,990	168,280	153,660	145,400	146,380	148,380	154,760	155,020
Connecticut	143,150	145,770	146,570	150,760	149,780	140,610	132,950	132,040	130,670	131,810	135,290
Missouri	125,200	129,950	180,510	136,840	130,160	121,660	119,730	122,720	124,270	127,640	129,830
Other States	1,435,130	1,496,270	1,546,940	1,614,060	1,612,290	1,513,990	1,449,060	1,452,960	1,481,190	1,533,650	1,566,780

% change from previous year[1]

State	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
USA	4.3	3.6	5.2	-0.8	-7.7	-5.0	-0.2	1.7	2.6	1.7
California	1.9	3.1	8.6	-1.4	-8.2	-5.8	1.3	1.5	2.9	0.7
Texas	8.5	2.1	6.5	-1.4	-9.5	-4.6	-1.7	2.6	3.5	3.1
New York	4.7	4.1	6.8	-1.0	-6.9	-6.6	-1.2	0.8	1.0	0.9
Florida	6.0	5.4	5.7	0.8	-5.9	-3.6	2.4	4.2	1.9	-0.5
Virginia	8.5	7.5	10.3	-0.1	-7.1	-2.6	5.0	3.5	3.3	1.8
Massachusetts	3.0	1.5	8.3	0.4	-11.4	-7.0	-2.4	0.6	2.1	2.2
Pennsylvania	4.8	3.9	4.0	-0.1	-7.4	-5.2	-2.6	0.6	3.1	0.3
New Jersey	2.5	3.2	3.2	0.3	-8.6	-5.4	-1.9	0.3	3.5	2.1
Illinois	2.4	-1.4	3.7	-1.7	-9.0	-6.7	-2.7	0.5	1.3	0.5
Washington	7.2	-1.7	3.3	0.6	-8.8	-6.7	-0.6	4.4	6.4	7.6
Ohio	4.1	0.6	1.9	-2.1	-7.0	-5.0	-4.1	1.0	1.6	2.0
Georgia	1.8	7.3	5.9	-2.6	-7.5	-2.5	-2.0	0.1	1.4	1.8
North Carolina	4.3	4.1	5.0	0.8	-9.9	-5.6	0.0	4.5	2.0	3.0
Michigan	1.8	1.6	3.6	-3.5	-5.1	-4.1	-3.7	0.0	-1.1	-1.1
Maryland	5.4	4.6	8.2	0.5	-2.3	-0.9	2.1	2.9	2.2	2.4
Colorado	10.5	7.5	7.5	-0.4	-12.2	-8.1	-1.4	-0.3	0.1	1.7
Minnesota	4.9	2.3	1.9	-3.0	-6.1	-5.5	0.4	2.1	1.5	1.5
Arizona	5.8	1.2	9.0	-0.4	-8.7	-5.4	0.7	1.4	4.3	0.2
Connecticut	1.8	0.5	2.9	-0.7	-6.1	-5.4	-0.7	-1.0	0.9	2.6
Missouri	3.8	38.9	-24.2	-4.9	-6.5	-1.6	2.5	1.3	2.7	1.7
Other States	4.4	3.4	4.3	-0.1	-6.1	-4.3	0.3	1.9	3.5	2.2

1. Percent changes are calculated using unrounded data.

[r] Revised
[p] Preliminary
Source: BC Stats

Table 14. High Technology Sector Wages and Salaries, 1997-2007

Value ($ million)

INDUSTRY	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Manufacturing Industries	**386.4**	**447.5**	**506.4**	**555.4**	**632.9**	**712.4**	**697.2**	**663.7**	**664.7**	**756.5**	**723.1**
Service Industries	**2,317.1**	**2,157.2**	**2,243.7**	**2,552.0**	**2,775.4**	**2,601.0**	**2,715.3**	**2,806.9**	**3,170.5**	**3,603.0**	**3,937.8**
Motion picture production & post production	46.3	55.3	118.4	98.4	97.6	105.9	92.9	104.0	126.9	148.4	167.2
Telecommunications	755.2	748.5	706.3	728.2	715.3	597.7	530.6	617.2	633.1	767.9	885.0
Engineering services	803.6	583.9	495.7	529.2	650.7	566.7	617.0	618.9	838.0	942.0	1,042.5
Software publishing	90.1	98.6	121.8	159.0	181.3	205.8	248.8	285.7	366.2	427.5	486.4
Other computer and related services	509.3	557.3	689.3	903.8	967.7	982.7	1,067.2	1,029.2	1,030.6	1,090.8	1,110.8
Other services	112.5	113.6	112.1	133.5	162.7	142.4	158.8	152.0	175.6	226.5	246.0
High Technology Sector Total	**2,703.5**	**2,604.7**	**2,750.1**	**3,107.4**	**3,408.3**	**3,313.5**	**3,412.5**	**3,470.6**	**3,835.2**	**4,359.5**	**4,661.0**
BC Industrial Aggregate	**49,881.0**	**50,610.4**	**51,326.5**	**54,340.9**	**55,613.6**	**56,584.4**	**58,819.2**	**61,450.9**	**65,301.7**	**70,759.6**	**74,943.7**

% change from previous year

INDUSTRY	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Manufacturing Industries	**15.8**	**13.2**	**9.7**	**14.0**	**12.6**	**-2.1**	**-4.8**	**0.2**	**13.8**	**-4.4**
Service Industries	**-6.9**	**4.0**	**13.7**	**8.8**	**-6.3**	**4.4**	**3.4**	**13.0**	**13.6**	**9.3**
Motion picture production & post production	19.4	114.1	-16.9	-0.8	8.5	-12.3	11.9	22.0	16.9	12.7
Telecommunications	-0.9	-5.6	3.1	-1.8	-16.4	-11.2	16.3	2.6	21.3	15.2
Engineering services	-27.3	-15.1	6.8	23.0	-12.9	8.9	0.3	35.4	12.4	10.7
Software publishing	9.4	23.5	30.5	14.0	13.5	20.9	14.8	28.2	16.7	13.8
Other computer and related services	9.4	23.7	31.1	7.1	1.6	8.6	-3.6	0.1	5.8	1.8
Other services	1.0	-1.3	19.1	21.9	-12.5	11.5	-4.3	15.5	29.0	8.6
High Technology Sector Total	**-3.7**	**5.6**	**13.0**	**9.7**	**-2.8**	**3.0**	**1.7**	**10.5**	**13.7**	**6.9**
BC Industrial Aggregate	**1.5**	**1.4**	**5.9**	**2.3**	**1.7**	**3.9**	**4.5**	**6.3**	**8.4**	**5.9**

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

Table 15. High Technology Sector Average Weekly Earnings,[1] 1997-2007

Dollars per employee week (including overtime)

INDUSTRY	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Manufacturing Industries	**690**	**760**	**710**	**710**	**800**	**990**	**1,060**	**1,050**	**960**	**1,000**	**950**
Service Industries	**970**	**920**	**890**	**940**	**940**	**940**	**980**	**960**	**1,050**	**1,100**	**1,140**
Motion picture production & post production	580	440	610	610	580	420	450	400	460	510	530
Telecommunications	890	900	880	880	870	910	900	930	1,010	1,110	1,230
Engineering services	1,210	1,110	960	1,090	1,240	1,170	1,300	1,250	1,620	1,640	1,690
Software publishing	900	900	920	950	950	970	1,010	1,000	990	1,110	1,140
Other computer and related services	1,080	1,080	1,100	1,130	1,080	1,100	1,110	1,150	1,160	1,160	1,140
Other services	500	480	470	490	480	500	530	490	520	560	590
High Technology Sector Total	**910**	**890**	**850**	**890**	**910**	**950**	**990**	**980**	**1,030**	**1,080**	**1,100**
BC Industrial Aggregate	**640**	**640**	**650**	**660**	**660**	**670**	**680**	**690**	**710**	**740**	**760**

% change from previous year

INDUSTRY	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Manufacturing Industries	**11.2**	**-6.7**	**-0.7**	**13.0**	**23.5**	**7.5**	**-1.4**	**-8.3**	**4.4**	**-5.3**
Service Industries	**-4.7**	**-2.9**	**5.2**	**0.3**	**-0.8**	**4.2**	**-1.2**	**9.0**	**4.4**	**3.4**
Motion picture production & post production	-23.0	36.4	0.5	-5.2	-27.5	6.3	-10.2	14.2	10.7	5.0
Telecommunications	1.6	-1.8	-0.4	-1.2	4.8	-0.8	2.4	9.3	9.8	10.3
Engineering services	-7.9	-13.7	13.6	13.2	-5.4	11.2	-3.8	29.5	1.3	2.9
Software publishing	-0.1	2.3	3.6	-0.7	2.5	3.9	-1.0	-0.8	11.9	3.1
Other computer and related services	-0.1	1.8	2.9	-3.9	1.8	0.4	3.8	1.1	0.2	-1.8
Other services	-2.7	-2.5	3.9	-2.1	5.1	4.5	-6.6	5.3	9.0	4.5
High Technology Sector Total	**-2.6**	**-4.0**	**4.0**	**2.8**	**3.7**	**4.8**	**-1.4**	**5.6**	**4.4**	**2.0**
BC Industrial Aggregate	**0.7**	**1.2**	**1.8**	**0.2**	**1.4**	**1.2**	**1.8**	**2.8**	**3.9**	**2.7**

1. Totals and percent changes are calculated using unrounded data.

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

Table 16. High Technology Sector Average Weekly Earnings, by Province, 1997-2007

Province	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Canada	840	850	860	900	910	930	960	980	1,010	1,050	1,080
British Columbia	910	890	850	890	910	950	990	980	1,030	1,080	1,100
Alberta	870	870	840	900	910	960	990	1,000	1,010	1,040	1,070
Ontario	880	900	930	980	990	1,000	1,040	1,050	1,080	1,140	1,150
Quebec	780	770	820	820	830	840	850	910	910	960	990

% change from previous year

Province	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Canada	1.0	1.8	4.0	1.3	2.0	3.2	2.6	2.7	4.5	2.3
British Columbia	-2.6	-4.0	4.0	2.8	3.7	4.8	-1.4	5.6	4.4	2.0
Alberta	0.3	-3.6	7.5	1.2	5.8	2.7	0.9	1.0	3.4	2.6
Ontario	2.7	3.2	4.8	1.6	1.0	3.4	0.8	3.6	5.0	1.1
Quebec	-0.3	5.8	0.2	0.6	1.7	0.8	7.2	0.2	5.3	3.3

[r] Revised

[p] Preliminary

Source: BC Stats

Table 17. High Technology Sector Wages and Salaries for Selected US States,[1] 1997-2007

Value ($Cdn million)[2]

State	1997	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
USA	540,789	650,486	761,040	849,989	852,061	799,930	706,442	687,018	677,213	683,381	689,275
California	109,905	128,774	155,495	199,136	181,381	164,594	146,803	146,538	145,743	146,558	146,699
Texas	40,876	51,794	55,646	63,515	65,849	59,999	52,093	50,295	50,399	52,459	52,821
New York	30,526	36,422	40,057	46,549	49,505	47,330	40,935	39,473	38,572	38,144	38,757
Florida	18,469	22,199	25,146	28,195	29,827	28,981	25,687	25,760	25,885	26,020	25,561
Virginia	17,683	23,413	27,294	31,634	34,012	30,778	28,111	28,945	29,432	29,510	29,672
Massachusetts	25,317	29,580	34,164	42,540	41,674	37,525	32,766	31,743	30,604	30,843	31,796
Pennsylvania	20,194	24,257	27,104	29,268	30,402	29,681	26,051	24,688	23,992	24,136	24,055
New Jersey	25,392	29,947	32,526	34,936	36,479	34,962	30,584	29,475	28,094	29,188	29,806
Illinois	23,477	27,231	29,403	31,974	32,343	30,042	25,855	24,773	24,612	24,150	23,948
Washington	21,930	29,392	35,626	36,207	35,094	33,012	28,153	23,384	24,011	25,520	27,015
Ohio	14,285	16,933	18,129	19,561	20,292	19,337	17,052	15,971	15,435	15,297	15,560
Georgia	14,099	16,835	19,617	22,836	22,694	21,476	19,221	18,142	17,755	17,797	17,980
North Carolina	12,607	14,756	17,091	19,601	20,400	18,893	16,618	16,229	16,306	16,252	16,710
Michigan	17,009	21,055	22,433	24,094	23,942	23,162	20,906	19,354	18,489	17,579	17,122
Maryland	12,022	14,417	41,466	18,254	20,021	20,242	18,334	18,387	18,182	18,150	18,660
Colorado	13,874	18,197	21,275	25,488	25,490	22,639	19,539	18,317	17,791	17,848	17,861
Minnesota	10,366	12,359	13,639	15,057	15,330	15,033	13,534	13,467	12,824	12,636	12,717
Arizona	9,823	12,154	12,865	15,001	15,375	14,428	12,628	12,441	12,387	12,802	12,512
Connecticut	11,356	13,514	14,707	15,690	16,279	15,250	13,277	12,964	12,450	12,245	12,456
Missouri	7,994	9,277	9,763	10,949	10,997	10,598	9,893	9,906	9,747	9,862	9,819
Other States	83,585	97,980	107,591	119,503	124,674	121,969	108,403	106,765	104,504	106,387	107,749

% change from previous year

State	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
USA	20.3	17.0	11.7	0.2	-6.1	-11.7	-2.7	-1.4	0.9	0.9
California	17.2	20.8	28.1	-8.9	-9.3	-10.8	-0.2	-0.5	0.6	0.1
Texas	26.7	7.4	14.1	3.7	-8.9	-13.2	-3.5	0.2	4.1	0.7
New York	19.3	10.0	16.2	6.3	-4.4	-13.5	-3.6	-2.3	-1.1	1.6
Florida	20.2	13.3	12.1	5.8	-2.8	-11.4	0.3	0.5	0.5	-1.8
Virginia	32.4	16.6	15.9	7.5	-9.5	-8.7	3.0	1.7	0.3	0.5
Massachusetts	16.8	15.5	24.5	-2.0	-10.0	-12.7	-3.1	-3.6	0.8	3.1
Pennsylvania	20.1	11.7	8.0	3.9	-2.4	-12.2	-5.2	-2.8	0.6	-0.3
New Jersey	17.9	8.6	7.4	4.4	-4.2	-12.5	-3.6	-4.7	3.9	2.1
Illinois	16.0	8.0	8.7	1.2	-7.1	-13.9	-4.2	-0.6	-1.9	-0.8
Washington	34.0	21.2	1.6	-3.1	-5.9	-14.7	-16.9	2.7	6.3	5.9
Ohio	18.5	7.1	7.9	3.7	-4.7	-11.8	-6.3	-3.4	-0.9	1.7
Georgia	19.4	16.5	16.4	-0.6	-5.4	-10.5	-5.6	-2.1	0.2	1.0
North Carolina	17.0	15.8	14.7	4.1	-7.4	-12.0	-2.3	0.5	-0.3	2.8
Michigan	23.8	6.5	7.4	-0.6	-3.3	-9.7	-7.4	-4.5	-4.9	-2.6
Maryland	19.9	187.6	-56.0	9.7	1.1	-9.4	0.3	-1.1	-0.2	2.8
Colorado	31.2	16.9	19.8	0.0	-11.2	-13.7	-6.3	-2.9	0.3	0.1
Minnesota	19.2	10.4	10.4	1.8	-1.9	-10.0	-0.5	-4.8	-1.5	0.6
Arizona	23.7	5.8	16.6	2.5	-6.2	-12.5	-1.5	-0.4	3.4	-2.3
Connecticut	19.0	8.8	6.7	3.8	-6.3	-12.9	-2.4	-4.0	-1.6	1.7
Missouri	16.0	5.2	12.1	0.4	-3.6	-6.7	0.1	-1.6	1.2	-0.4
Other States	17.2	9.8	11.1	4.3	-2.2	-11.1	-1.5	-2.1	1.8	1.3

1. Top 20 states by employment.
2. Figures converted from U.S. dollar data using an average annual exchange rate.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 18. High Technology Sector Average Weekly Earnings for Selected US States,[1] 1997-2007

Value ($Cdn)[2]

State	1997	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
USA	1362	1571	1772	1882	1902	1935	1798	1753	1698	1671	1657
California	1580	1816	2126	2508	2317	2291	2170	2138	2094	2048	2034
Texas	1391	1624	1709	1831	1926	1941	1766	1734	1694	1704	1664
New York	1361	1551	1639	1783	1915	1967	1821	1778	1724	1688	1699
Florida	1132	1284	1381	1465	1537	1587	1459	1429	1378	1359	1342
Virginia	1417	1730	1877	1972	2121	2067	1938	1901	1868	1813	1791
Massachusetts	1538	1744	1986	2284	2228	2265	2127	2111	2022	1996	2014
Pennsylvania	1305	1497	1610	1671	1739	1832	1696	1650	1595	1556	1546
New Jersey	1668	1920	2021	2102	2188	2294	2122	2085	1981	1989	1988
Illinois	1379	1562	1711	1795	1846	1886	1740	1714	1694	1641	1618
Washington	1669	2086	2571	2530	2437	2512	2296	1918	1887	1885	1855
Ohio	1150	1310	1394	1475	1563	1603	1487	1452	1389	1355	1351
Georgia	1273	1494	1622	1784	1819	1862	1709	1646	1609	1591	1578
North Carolina	1221	1370	1524	1665	1720	1768	1647	1609	1547	1511	1508
Michigan	1366	1661	1742	1805	1858	1894	1782	1713	1636	1574	1549
Maryland	1415	1611	4430	1802	1967	2036	1860	1828	1757	1717	1724
Colorado	1423	1689	1838	2048	2057	2082	1956	1860	1813	1817	1789
Minnesota	1199	1363	1470	1592	1671	1746	1663	1647	1536	1491	1479
Arizona	1301	1522	1592	1702	1752	1801	1666	1630	1601	1587	1548
Connecticut	1521	1778	1924	1996	2084	2080	1915	1883	1827	1782	1766
Missouri	1225	1369	1037	1535	1620	1671	1585	1548	1504	1482	1450

% change from previous year

State	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
USA	15.3	12.8	6.2	1.1	1.7	-7.1	-2.5	-3.1	-1.6	-0.8
California	14.9	17.1	17.9	-7.6	-1.1	-5.3	-1.4	-2.1	-2.2	-0.6
Texas	16.7	5.2	7.1	5.2	0.7	-9.0	-1.8	-2.3	0.6	-2.3
New York	13.9	5.7	8.8	7.4	2.7	-7.4	-2.4	-3.1	-2.1	0.7
Florida	13.4	7.5	6.1	4.9	3.3	-8.1	-2.1	-3.6	-1.4	-1.3
Virginia	22.1	8.5	5.1	7.6	-2.5	-6.2	-1.9	-1.7	-3.0	-1.2
Massachusetts	13.4	13.8	15.0	-2.4	1.7	-6.1	-0.8	-4.2	-1.3	0.9
Pennsylvania	14.7	7.6	3.8	4.0	5.4	-7.4	-2.7	-3.4	-2.4	-0.7
New Jersey	15.1	5.2	4.0	4.1	4.9	-7.5	-1.8	-5.0	0.4	0.0
Illinois	13.2	9.5	4.9	2.9	2.1	-7.7	-1.5	-1.1	-3.2	-1.4
Washington	25.0	23.3	-1.6	-3.7	3.1	-8.6	-16.5	-1.6	-0.1	-1.6
Ohio	13.9	6.4	5.8	6.0	2.5	-7.2	-2.4	-4.3	-2.5	-0.3
Georgia	17.3	8.6	10.0	2.0	2.4	-8.2	-3.7	-2.2	-1.1	-0.8
North Carolina	12.2	11.2	9.2	3.3	2.8	-6.8	-2.3	-3.9	-2.3	-0.2
Michigan	21.6	4.9	3.7	2.9	1.9	-5.9	-3.9	-4.4	-3.8	-1.6
Maryland	13.8	175.0	-59.3	9.2	3.5	-8.6	-1.8	-3.9	-2.3	0.4
Colorado	18.7	8.8	11.4	0.5	1.2	-6.1	-4.9	-2.5	0.3	-1.6
Minnesota	13.7	7.9	8.3	4.9	4.5	-4.7	-0.9	-6.7	-2.9	-0.8
Arizona	16.9	4.6	6.9	2.9	2.8	-7.5	-2.1	-1.8	-0.9	-2.4
Connecticut	16.9	8.2	3.7	4.4	-0.2	-7.9	-1.7	-3.0	-2.5	-0.9
Missouri	11.8	-24.2	47.9	5.6	3.1	-5.1	-2.3	-2.8	-1.5	-2.1

1. Top 20 states by employment.
2. Figures converted from U.S. dollar data using an average annual exchange rate.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 19. High Technology Sector Establishments,[1] by Development Region and Regional District, 2004-2007

Development Region / Regional District		2004			2005			2006			2007		
		Mfg	Service	Total	Mfg	Service	Total	Mfg	Service	Total	Mfg	Service	Total
Vancouver Island/Coast		**107**	**1,264**	**1,371**	**114**	**1,355**	**1,469**	**114**	**1,409**	**1,523**	**107**	**1,291**	**1,398**
23	Alberni-Clayoquot	3	21	24	3	24	27	3	29	32	3	24	27
17	Capital	59	795	854	66	853	919	66	898	964	61	825	886
45	Central Coast	0	3	3	0	3	3	0	3	3	0	4	4
25	Comox-Strathcona	16	126	142	16	132	148	16	136	152	14	139	153
19	Cowichan Valley	10	85	95	11	89	100	10	83	93	12	75	87
43	Mount Waddington	1	17	18	0	18	18	0	16	16	0	15	15
21	Nanaimo	18	197	215	18	213	231	19	224	243	17	192	209
27	Powell River	0	20	20	0	23	23	0	20	20	0	17	17
Mainland/Southwest		**557**	**5,156**	**5,713**	**569**	**5,364**	**5,933**	**580**	**5,675**	**6,255**	**551**	**5,260**	**5,811**
09	Fraser Valley	29	168	197	31	183	214	27	191	218	27	184	211
15	Greater Vancouver	518	4,882	5,400	528	5,077	5,605	544	5,381	5,925	514	4,982	5,496
31	Squamish-Lillooet	3	60	63	3	58	61	3	58	61	3	49	52
29	Sunshine Coast	7	46	53	7	46	53	6	45	51	7	45	52
Thompson/Okanagan		**75**	**557**	**632**	**86**	**595**	**681**	**80**	**641**	**721**	**77**	**610**	**687**
35	Central Okanagan	41	214	255	48	221	269	45	247	292	41	229	270
39	Columbia-Shuswap	3	61	64	3	66	69	2	66	68	4	61	65
37	North Okanagan	10	81	91	12	90	102	11	97	108	9	91	100
07	Okanagan-Similkameen	7	62	69	8	71	79	7	77	84	8	81	89
33	Thompson-Nicola	14	139	153	15	147	162	15	154	169	15	148	163
Kootenay		**16**	**191**	**207**	**16**	**194**	**210**	**14**	**202**	**216**	**13**	**184**	**197**
03	Central Kootenay	7	84	91	6	87	93	6	88	94	6	87	93
01	East Kootenay	3	66	69	4	64	68	3	75	78	3	69	72
05	Kootenay Boundary	6	41	47	6	43	49	5	39	44	4	28	32
Cariboo		**19**	**157**	**176**	**17**	**150**	**167**	**18**	**165**	**183**	**15**	**152**	**167**
41	Cariboo	5	66	71	3	60	63	4	74	78	4	64	68
53	Fraser-Fort George	14	91	105	14	90	104	14	91	105	11	88	99
North Coast		**2**	**45**	**47**	**1**	**49**	**50**	**2**	**52**	**54**	**2**	**45**	**47**
49	Kitimat-Stikine	2	32	34	1	34	35	2	35	37	2	33	35
47	Skeena-Queen Charlotte	0	13	13	0	15	15	0	17	17	0	12	12
Nechako		**5**	**48**	**53**	**5**	**53**	**58**	**4**	**52**	**56**	**4**	**48**	**52**
51	Bulkley-Nechako	5	47	52	5	51	56	4	50	54	4	46	50
57	Stikine	0	1	1	0	2	2	0	2	2	0	2	2
Northeast		**7**	**145**	**152**	**6**	**159**	**165**	**5**	**175**	**180**	**6**	**174**	**180**
55	Peace River	6	133	139	5	149	154	4	166	170	6	173	179
59	Northern Rockies	1	12	13	1	10	11	1	9	10	0	1	1
Total[2]		**789**	**7,580**	**8,369**	**815**	**7,933**	**8,748**	**820**	**8,386**	**9,206**	**777**	**7,796**	**8,573**

1. Establishments with zero employees are not included in these figures.
2. Figures do not add to totals because some establishments did not have geographic codes.

Source: BC Stats

Table 20. High Technology Sector Establishments,[1] by Industry, 1998-2007

Industry	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Manufacturing Industries	**838**	**871**	**859**	**826**	**809**	**783**	**789**	**815**	**820**	**777**
Service Industries	**6,028**	**6,552**	**7,241**	**7,526**	**7,443**	**7,524**	**7,580**	**7,933**	**8,386**	**7,796**
Motion picture production & post production	583	667	793	851	864	859	877	917	968	824
Telecommunications	283	294	305	337	459	426	397	385	275	253
Engineering services	1,934	1,956	1,930	1,845	1,792	1,795	1,793	1,862	1,939	1,771
Computer and related services	2,000	2,316	2,801	2,967	2,745	2,811	2,807	2,993	3,309	3,155
Other services	1,228	1,319	1,412	1,526	1,583	1,633	1,706	1,776	1,895	1,793
High Technology Sector	**6,866**	**7,423**	**8,100**	**8,352**	**8,252**	**8,307**	**8,369**	**8,748**	**9,206**	**8,573**

	% change from previous year[2]								
Industry	1999	2000	2001	2002	2003	2004	2005	2006	2007
Manufacturing Industries	**3.9**	**-1.4**	**-3.8**	**-2.1**	**-3.2**	**0.8**	**3.3**	**0.6**	**-5.2**
Service Industries	**8.7**	**10.5**	**3.9**	**-1.1**	**1.1**	**0.7**	**4.7**	**5.7**	**-7.0**
Motion picture production & post production	14.4	18.9	7.3	1.5	-0.6	2.1	4.6	5.6	-14.9
Telecommunications	3.9	3.7	10.5	36.2	-7.2	-6.8	-3.0	-28.6	-8.0
Engineering services	1.1	-1.3	-4.4	-2.9	0.2	-0.1	3.8	4.1	-8.7
Computer and related services	15.8	20.9	5.9	-7.5	2.4	-0.1	6.6	10.6	-4.7
Other services	7.4	7.1	8.1	3.7	3.2	4.5	4.1	6.7	-5.4
High Technology Sector	**8.1**	**9.1**	**3.1**	**-1.2**	**0.7**	**0.7**	**4.5**	**5.2**	**-6.9**

1. Establishments with zero employees are not included in these figures.
2. Note that there is a slight data break between 2005 and 2006 for the "Telecommunications" and "Computer and Related Services" industry groups. As such, growth rates should be used with caution. See Appendix A for details.

r Revised

Source: BC Stats and Statistics Canada

Table 21. High Technology Sector Establishments, by Industry and Establishment Size, 2007

	Number of establishments, by number of employees							
Industry	1 to 4	5 to 9	10 to 19	20 to 49	50 plus	Subtotal	None[1]	Total
Manufacturing Industries	**357**	**161**	**94**	**88**	**77**	**777**	**545**	**1,322**
Service Industries	**5,478**	**991**	**613**	**443**	**271**	**7,796**	**15,088**	**22,884**
Motion picture production & post production	674	74	36	21	19	824	2,299	3,123
Telecommunications	137	52	29	32	25	275	305	580
Engineering services	1,214	233	149	129	46	1,771	2,651	4,422
Computer and related services	2,195	346	233	158	117	3,049	6,257	9,306
Other services	1,258	286	166	103	64	1,877	3,576	5,453
Total for sector	**5,835**	**1,152**	**707**	**531**	**348**	**8,573**	**15,633**	**24,206**
Total for all Industries	**94,857**	**33,655**	**19,808**	**12,113**	**6,819**	**167,252**	**225,415**	**392,667**

1. Statistics Canada has changed the structure of the Business Register, from which these data are derived, to include businesses with revenues less than $30,000. In previous years these businesses were excluded, such that the number of businesses with no employees will be substantially higher compared to the counts published in previous years.

Source: BC Stats and Statistics Canada

Table 22. Shipments and Exports of BC High Technology Goods and Total Processed Goods, 1997-2007

Value ($000,000)

	1997	1998	1999	2000	2001	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
High Technology Goods											
Total Shipments[1]	1,763	1,845	2,267	2,819	2,524	2,224	2,464	2,548	2,404	2,741	2,622
Exports	581	769	840	923	748	685	635	687	705	857	877
Exports as % of Shipments	33.0	41.7	37.1	32.7	29.6	30.8	25.8	26.9	29.3	31.3	33.5
Total Processed Goods											
Total Shipments[1]	33,496	31,757	36,679	40,699	38,303	38,610	39,691	42,147	43,212	44,553	43,175
Exports of Processed Goods[2]	21,783	20,874	23,955	25,175	22,869	22,534	20,879	23,572	22,579	22,775	21,814
Export Orientation (%)	65.0	65.7	65.3	61.9	59.7	58.4	52.6	55.9	52.3	51.1	50.5

% change from previous year

	1997	1998	1999	2000	2001	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
High Technology Goods											
Total Shipments	14.5	4.7	22.9	24.4	-10.4	-11.9	10.8	3.4	-5.7	14.0	-4.3
Exports	29.0	32.3	9.2	9.9	-19.0	-8.5	-7.2	8.1	2.7	21.5	2.4
Total Processed Goods											
Total Shipments	1.7	-5.2	15.5	11.0	-5.9	0.8	2.8	6.2	2.5	3.1	-3.1
Exports of Processed Goods	2.5	-4.2	14.8	5.1	-9.2	-1.5	-7.3	12.9	-4.2	0.9	-4.2

1. Total shipments represent revenues from all production, sales, services and related activities in the manufacturing sector.
2. "Processed goods" excludes selected agricultural, fish, logging, mining and energy products not produced by BC manufacturing industries.

[r] Revised
[p] Preliminary

Source: BC Stats and Statistics Canada

Table 23. Domestic Exports of High Technology Goods, by Destination and Mode of Transport, 1997-2007

Value ($ million)[1]

Destination	Mode of Transport[2]	1997	1998	1999	2000	2001	2002	2003	2004[r]	2005[r]	2006[r]	2007[p]
United States	Land	240.7	384.8	408.6	477.4	343.8	384.2	357.5	352.0	330.8	402.2	434.0
	Sea	5.6	3.4	5.2	1.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0
	Air	168.1	208.4	266.2	294.1	251.2	173.9	149.2	157.2	156.3	185.6	169.8
	Total	**414.4**	**596.6**	**680.0**	**773.0**	**596.4**	**558.1**	**506.6**	**509.2**	**487.1**	**587.8**	**603.8**
Pacific Rim (total)	Land	14.9	8.5	6.8	0.4	1.0	7.5	4.4	1.5	0.6	0.2	8.1
	Sea	5.6	8.9	4.7	9.4	4.6	13.7	2.2	3.4	11.3	5.4	3.4
	Air	94.1	78.7	72.3	56.9	27.8	25.9	35.7	61.3	85.6	88.1	63.2
	Total	**114.6**	**96.1**	**83.8**	**66.8**	**33.3**	**47.2**	**42.3**	**66.3**	**97.4**	**93.7**	**74.7**
Japan	Land	2.7	0.0	0.4	0.1	0.3	4.5	1.7	0.3	0.3	0.2	5.2
	Sea	0.3	0.9	0.3	2.1	0.7	12.1	0.1	0.3	0.1	0.8	0.5
	Air	16.3	7.7	4.5	28.1	8.7	5.4	5.5	10.4	19.6	18.7	10.4
	Total	**19.3**	**8.6**	**5.2**	**30.4**	**9.7**	**22.0**	**7.3**	**11.1**	**20.0**	**19.7**	**16.1**
Pacific Rim (excluding Japan)	Land	12.2	8.5	6.4	0.3	0.7	3.1	2.7	1.2	0.3	0.0	2.9
	Sea	5.4	8.1	4.4	7.4	3.8	1.6	2.1	3.1	11.2	4.6	2.8
	Air	77.8	70.9	67.8	28.8	19.1	20.5	30.2	50.9	66.0	69.3	52.8
	Total	**95.3**	**87.5**	**78.6**	**36.4**	**23.6**	**25.1**	**35.0**	**55.2**	**77.4**	**74.0**	**58.6**
European Union	Land	1.5	5.7	0.2	1.6	3.0	0.5	0.3	5.2	0.5	0.4	1.0
	Sea	1.1	1.5	4.6	1.2	8.3	5.3	7.9	8.3	2.1	3.5	15.7
	Air	30.8	51.5	49.4	57.4	76.4	52.5	43.3	52.2	67.7	102.7	110.6
	Total	**33.4**	**58.7**	**54.2**	**60.3**	**87.8**	**58.3**	**51.5**	**65.7**	**70.3**	**106.6**	**127.3**
All Other Countries	Land	1.5	0.7	1.6	2.1	7.1	1.6	1.3	2.3	0.7	5.2	4.7
	Sea	3.0	1.4	1.2	2.6	9.1	1.9	2.3	2.9	2.0	2.7	4.4
	Air	14.3	15.8	19.3	18.3	14.3	17.5	31.1	40.2	47.7	61.0	62.2
	Total	**18.9**	**17.9**	**22.0**	**23.0**	**30.6**	**21.0**	**34.7**	**45.4**	**50.3**	**68.9**	**71.3**
Total	Land	258.8	399.7	417.2	481.6	354.9	393.8	363.5	361.0	332.5	407.9	447.9
	Sea	15.3	15.2	15.7	14.7	23.4	20.9	12.4	14.7	15.3	11.6	23.5
	Air	307.3	354.4	407.2	426.7	369.8	269.9	259.2	311.0	357.3	437.4	405.8
	Total	**581.4**	**769.2**	**840.1**	**923.1**	**748.1**	**684.6**	**635.2**	**686.6**	**705.1**	**857.0**	**877.1**

% of Exports to Destination[3]

Destination	Mode of Transport	1997	1998	1999	2000	2001	2002	2003	2004[r]	2005[r]	2006[r]	2007[p]
United States	Land	58.1	64.5	60.1	61.8	57.6	68.8	70.6	69.1	67.9	68.4	71.9
	Sea	1.4	0.6	0.8	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
	Air	40.6	34.9	39.1	38.0	42.1	31.2	29.4	30.9	32.1	31.6	28.1
Pacific Rim (total)	Land	13.0	8.9	8.1	0.7	3.0	16.0	10.4	2.3	0.6	0.2	10.8
	Sea	4.9	9.3	5.6	14.1	13.7	29.1	5.2	5.1	11.6	5.8	4.5
	Air	82.1	81.8	86.3	85.2	83.3	54.9	84.4	92.5	87.9	94.0	84.7
Japan	Land	14.2	0.0	8.3	0.5	3.1	20.3	23.7	2.8	1.5	0.8	32.0
	Sea	1.3	10.0	5.1	6.8	7.7	55.1	1.5	2.7	0.3	4.0	3.3
	Air	84.5	89.9	86.6	92.7	89.2	24.6	74.7	94.4	98.2	95.2	64.6
Pacific Rim (excluding Japan)	Land	12.8	9.7	8.1	0.8	2.9	12.2	7.6	2.2	0.3	0.0	5.0
	Sea	5.6	9.2	5.6	20.2	16.2	6.4	5.9	5.6	14.5	6.3	4.8
	Air	81.6	81.0	86.3	78.9	81.0	81.5	86.5	92.2	85.2	93.7	90.2
European Union	Land	4.6	9.6	0.5	2.7	3.5	0.8	0.7	7.9	0.7	0.4	0.8
	Sea	3.2	2.6	8.5	2.0	9.5	9.1	15.3	12.7	3.0	3.3	12.3
	Air	92.2	87.8	91.0	95.3	87.0	90.2	84.1	79.4	96.3	96.3	86.8
All Other Countries	Land	8.2	3.8	7.1	9.2	23.4	7.7	3.9	5.0	1.3	7.5	6.7
	Sea	16.0	7.6	5.4	11.2	29.8	8.8	6.7	6.3	3.9	3.9	6.2
	Air	75.8	88.5	87.5	79.6	46.8	83.5	89.4	88.7	94.8	88.6	87.2
Total	Land	44.5	52.0	49.7	52.2	47.4	57.5	57.2	52.6	47.2	47.6	51.1
	Sea	2.6	2.0	1.9	1.6	3.1	3.0	1.9	2.1	2.2	1.4	2.7
	Air	52.9	46.1	48.5	46.2	49.4	39.4	40.8	45.3	50.7	51.0	46.3

1. Totals may not equal the sum of Land, Sea and Air due to the fact that some respondents did not fill in the survey completely.
2. Shipments by land to overseas markets represent the export of BC produced high technology products transshipped by US Ports such as Seattle or Portland.
3. Percentages may not add to 100 due to rounding.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 24. Top 25 High Technology Export Commodities, 2007[P]

HS Code	Commodity Description [1]	Value ($000,000)	% Total Exports
88033000	Aircraft parts nes	152.5	17.4
90328900	Automatic regulating or controlling instruments and apparatus, nes	74.7	8.5
84715000	Process units, o/t 8471.41/.49, w/n cntg in same housing storage, input, output units	68.7	7.8
84714900	Other digital automatic data processing machines, presented in the form of systems	48.8	5.6
85258020	Digital cameras	46.8	5.3
84733000	Parts and accessories of automatic data processing machines & units thereof	35.9	4.1
90189000	Instruments and appliances used in medical or veterinary sciences, nes	31.3	3.6
90181200	Ultrasonic scanning apparatus	25.9	3.0
90181900	Electro-diagnostic apparatus, nes	23.4	2.7
85414000	Photosensitive semiconductor devices, photovoltaic cells & light emitting diodes	22.1	2.5
90213900	Artificial parts of the body, nes	20.6	2.4
85256000	Transmission apparatus, for radio-broadcasting/tv, incorporating reception apparatus	20.5	2.3
85234039	Optical media, recorded discs for laser reading systems, nes	18.0	2.1
28444019	Radioactive elements & isotopes and compounds, nes	16.7	1.9
90148000	Navigational instruments and appliances nes	15.9	1.8
85269100	Radio navigational aid apparatus	15.3	1.7
85176190	Base stations, nes	14.9	1.7
85269200	Radio remote control apparatus	14.4	1.6
85258010	Television cameras	14.1	1.6
84719000	Other data processing machines, nes	13.3	1.5
85177000	Parts, of TV sets, incl for cell/wireless networks, oth app for trans/recep of voice/img/d	13.3	1.5
88032000	Aircraft under-carriages and parts thereof	13.2	1.5
90158000	Surveying, hydrographic, oceanographic, meteorological or geophysical inst nes	11.0	1.3
90319000	Parts and accessories for measuring or checking inst, appl and machines, nes	10.9	1.2
85176919	Elecrical apparatus for line telephony or line telegraphy, nes	9.8	1.1
Subtotal		**752.2**	**85.8**
	All Other High Technology Commodities	125.0	14.2
Total		**877.1**	**100.0**

HS code = Harmonized System commodity code; NES=Not Elsewhere Specified
1. Commodity descriptions are drawn from the approved Harmonized System coding manual.
They contain some abbreviations that have been left in the original form in this table.

[P] Preliminary

Source: BC Stats and Statistics Canada

Table 25. Top 25 High Technology Import Commodities, 2007[P]

HS Code	Commodity Description [1]	Value ($000,000)	% Total Imports
8471300000	Portable digital auto data process mach, not more than 10 kg, w CPU, keybrd & display	288.5	6.2
8802400014	Airplanes,passenger, non military, of an unladen weight >15000kg,new	245.0	5.2
8528723300	Colour, high definition, television receivers, with flat panel screen, nes	222.9	4.8
8471500090	Digital process units, o/t 8471.41/49, w/n cntg strg,input/output o/t w CRT, nes	207.1	4.4
8517120020	Cellular telephones, other than for installation in motor vehicles	167.3	3.6
8517620090	Machines for r/c/t or regenertation voice, images or data, incl switching & routing app,n	154.7	3.3
8525800030	Digital cameras and video camera recorders	134.1	2.9
8803300000	Parts of airplanes or helicopters nes	131.2	2.8
3004900079	Medicaments nes, for human use, in dosage	125.4	2.7
8528510000	Other monitors, of a kind used in an automatic data processing system of hd 84.71[2]	119.2	2.5
8473302000	Printed circuit assemblies of the machines of heading 84.71	116.2	2.5
8473309000	Parts & access (o/t printed circuit assy) of the machines of heading 84.71, nes	104.2	2.2
8526910099	Radio navigational aid apparatus, nes	99.8	2.1
8517700015	Parts, printed circuit asy, of goods of cl 8517.62.00.10, 8517.62.00.90 or 8517.69.10.00	92.3	2.0
8443999000	Parts and accessories of printing machinery, nes	91.8	2.0
8517700090	Parts tel sets; oth app for trans/recep voice/img/data, o/t 84.43,85.25,85.27,85.28, nes	74.6	1.6
8471801000	Control or adapter units, other than in the form of a system	65.2	1.4
8471700013	Other hard magnetic disk drive units, other than presented in form of system	62.1	1.3
8443329090	Other printing machines, capable of connecting to an adpm or network, nes, o/t system	51.4	1.1
8523401011	Rec laser readg discs, for reprod phenom o/t snd/img, prepackd softw, for adpm, for re	50.7	1.1
8411910021	Parts of turbojet or turbopropeller for civil aircraft	48.6	1.0
8526920090	Radio remote control apparatus, nes	44.5	1.0
8471410090	Other digital auto data process mach containting CPU, input & output, other than CRT,	43.0	0.9
8802300014	Airplanes, non military, multiple turbofan eng, unladen weight >4536kg, <=15000 kg, n	42.2	0.9
8521901000	Laser video disc players, w/n incorp video tuner	41.0	0.9
Subtotal		**2,823.0**	**60.3**
	All Other High Technology Commodities	1,859.1	39.7
Total		**4,682.2**	**100.0**

HS code = Harmonized System commodity code; NES=Not Elsewhere Specified
1. Commodity descriptions are drawn from the approved Harmonized System coding manual.
They contain some abbreviations that have been left in the original form in this table.
2. Refers to automatic data processing machines, magnetic or optical readers, etc.
3. Refers to telephonic switching apparatus, facsimile apparatus, etc.
4. Refers to facsimile machines, transmission/reception apparatus for radio/TV broadcasting.

[P] Preliminary

Source: BC Stats

Table 26. Domestic Exports of High Technology Goods and Total Goods, by Destination 1997-2007

Value ($000,000)

	1997	1998	1999	2000	2001	2002	2003	2004[r]	2005[r]	2006[r]	2007[p]
High Technology Exports[1]											
United States	414.4	596.6	680.0	773.0	596.4	558.1	506.6	509.2	487.1	587.8	603.8
Mexico	0.6	1.1	3.1	0.9	0.9	1.7	1.9	3.6	4.7	4.8	7.8
European Union	33.4	58.7	54.2	60.3	87.8	58.3	51.5	65.7	70.3	106.6	127.3
United Kingdom	*7.9*	*6.9*	*6.9*	*13.0*	*20.4*	*21.9*	*16.0*	*19.3*	*15.4*	*17.0*	*19.2*
France	*5.9*	*6.6*	*6.7*	*1.5*	*5.3*	*4.0*	*4.7*	*9.5*	*7.9*	*5.9*	*5.0*
Germany	*4.5*	*13.7*	*6.2*	*5.2*	*7.1*	*7.3*	*8.0*	*9.5*	*10.4*	*14.6*	*40.8*
Italy	*0.6*	*2.5*	*2.2*	*18.5*	*31.6*	*2.9*	*3.6*	*4.6*	*9.4*	*22.5*	*22.0*
Netherlands	*8.2*	*11.3*	*9.1*	*5.0*	*5.2*	*2.8*	*3.4*	*6.0*	*6.8*	*6.5*	*8.8*
Pacific Rim	114.6	96.1	83.8	66.8	33.3	47.2	42.3	66.3	97.4	93.7	74.7
Hong Kong	*21.9*	*32.0*	*12.0*	*6.5*	*6.2*	*3.3*	*6.2*	*10.9*	*14.9*	*9.8*	*5.0*
Mainland China	*20.1*	*27.1*	*17.7*	*2.3*	*3.0*	*4.1*	*10.3*	*14.5*	*23.3*	*17.6*	*15.1*
Japan	*19.3*	*8.6*	*5.2*	*30.4*	*9.7*	*22.0*	*7.3*	*11.1*	*20.0*	*19.7*	*16.1*
South Korea	*16.7*	*4.6*	*11.9*	*9.1*	*6.2*	*4.3*	*2.5*	*7.6*	*8.1*	*10.6*	*6.7*
Taiwan	*12.2*	*14.9*	*24.2*	*4.3*	*2.2*	*4.3*	*5.8*	*3.1*	*7.5*	*7.1*	*5.8*
All Other Countries	18.2	16.8	18.9	22.1	29.7	19.3	32.8	41.8	45.6	64.1	63.5
Total	**581.4**	**769.2**	**840.1**	**923.1**	**748.1**	**684.6**	**635.2**	**686.6**	**705.1**	**857.0**	**877.1**
Total Exports											
United States	14,858.5	16,375.0	19,370.7	22,196.0	22,104.4	19,665.8	18,792.3	20,137.4	22,101.5	20,518.7	19,092.3
Mexico	*61.9*	*60.7*	*42.2*	*57.7*	*83.2*	*79.0*	*108.6*	*198.4*	*237.0*	*185.3*	*198.6*
European Union	2,105.9	2,027.5	1,942.3	2,597.7	2,143.6	1,817.8	1,882.9	2,186.0	2,452.8	2,259.0	2,318.7
United Kingdom	288.7	302.5	319.2	381.2	355.0	337.0	305.6	341.3	421.0	386.2	401.6
France	*183.5*	*175.8*	*167.1*	*217.0*	*167.9*	*149.7*	*165.2*	*180.5*	*189.5*	*152.4*	*167.8*
Germany	*475.6*	*395.6*	*299.7*	*534.5*	*382.4*	*320.9*	*380.6*	*428.3*	*470.6*	*446.9*	*463.5*
Italy	*474.1*	*439.1*	*445.6*	*617.1*	*532.8*	*428.6*	*467.0*	*463.0*	*565.9*	*471.1*	*431.8*
Netherlands	*204.3*	*251.5*	*235.3*	*174.6*	*211.9*	*222.8*	*228.0*	*325.1*	*300.7*	*368.9*	*405.1*
Pacific Rim	*8,966.2*	*6,866.8*	*7,110.3*	*8,065.7*	*6,582.5*	*6,528.8*	*6,635.9*	*7,470.6*	*8,077.5*	*9,034.9*	*8,596.5*
Hong Kong	344.8	261.7	265.0	277.8	217.8	207.7	179.8	252.1	213.2	199.2	166.5
Mainland China	*449.2*	*458.0*	*582.3*	*706.4*	*726.8*	*756.3*	*919.5*	*1,225.4*	*1,325.5*	*1,485.9*	*1,744.4*
Japan	*6,002.4*	*4,539.8*	*4,466.7*	*4,890.8*	*4,066.1*	*3,858.5*	*3,660.0*	*3,805.1*	*4,163.8*	*4,706.8*	*4,102.0*
South Korea	*939.3*	*654.3*	*737.3*	*895.0*	*712.2*	*725.1*	*777.4*	*909.6*	*1,167.7*	*1,364.5*	*1,307.8*
Taiwan	*431.2*	*349.2*	*352.0*	*402.2*	*314.9*	*339.3*	*433.0*	*486.7*	*498.7*	*520.7*	*462.4*
All Other Countries	706.1	612.1	578.3	722.3	765.9	737.0	844.6	1,015.4	1,298.5	1,470.3	1,336.2
Total	**26,698.6**	**25,942.1**	**29,043.8**	**33,639.4**	**31,679.7**	**28,828.4**	**28,264.4**	**31,007.8**	**34,167.3**	**33,468.2**	**31,542.3**

% change from previous year

	1998	1999	2000	2001	2002	2003	2004[r]	2005[r]	2006[r]	2007[p]
High Technology Exports										
United States	44.0	14.0	13.7	-22.8	-6.4	-9.2	0.5	-4.3	20.7	2.7
Mexico	76.5	191.4	-69.9	-5.8	93.4	9.5	88.7	31.4	2.8	62.6
European Union	75.4	-7.5	11.1	45.7	-33.7	-11.6	27.6	6.9	51.7	19.5
United Kingdom	*-13.1*	*0.2*	*87.7*	*57.4*	*7.3*	*-26.8*	*20.6*	*-20.6*	*10.4*	*13.3*
France	*11.5*	*0.8*	*-77.6*	*253.7*	*-24.1*	*17.3*	*102.7*	*-17.2*	*-24.8*	*-15.2*
Germany	*201.7*	*-54.4*	*-15.9*	*34.8*	*3.4*	*9.9*	*18.4*	*9.8*	*40.3*	*178.8*
Italy	*355.6*	*-11.3*	*725.8*	*70.8*	*-90.7*	*23.2*	*26.7*	*104.2*	*140.0*	*-2.3*
Netherlands	*37.1*	*-19.4*	*-44.6*	*4.2*	*-45.9*	*20.2*	*75.4*	*13.6*	*-4.1*	*35.9*
Pacific Rim	-16.1	-12.8	-20.3	-50.1	41.5	-10.3	56.6	46.9	-3.8	-20.2
Hong Kong	*46.3*	*-62.4*	*-45.7*	*-5.2*	*-46.3*	*86.6*	*74.6*	*37.0*	*-34.0*	*-48.7*
Mainland China	*34.9*	*-34.9*	*-87.0*	*29.5*	*36.6*	*152.5*	*40.5*	*60.8*	*-24.1*	*-14.5*
Japan	*-55.4*	*-39.5*	*483.0*	*-68.0*	*127.1*	*-66.6*	*50.5*	*80.8*	*-1.5*	*-18.1*
South Korea	*-72.2*	*157.9*	*-23.9*	*-31.5*	*-31.5*	*-41.3*	*205.8*	*6.0*	*30.6*	*-36.7*
Taiwan	*21.6*	*62.7*	*-82.4*	*-48.1*	*94.4*	*34.2*	*-46.0*	*139.9*	*-5.3*	*-17.7*
All Other Countries	-8.0	12.6	16.9	34.2	-35.0	70.1	27.4	9.2	40.4	-0.9
Total Growth	**32.3**	**9.2**	**9.9**	**-19.0**	**-8.5**	**-7.2**	**8.1**	**2.7**	**21.5**	**2.4**
Total Exports										
United States	10.2	18.3	14.6	-0.4	-11.0	-4.4	7.2	9.8	-7.2	-7.0
Mexico	-2.0	-30.5	36.7	44.3	-5.1	37.4	82.7	19.5	-21.8	7.2
European Union	-3.7	-4.2	33.7	-17.5	-15.2	3.6	16.1	12.2	-7.9	2.6
United Kingdom	*4.8*	*5.5*	*19.4*	*-6.9*	*-5.1*	*-9.3*	*11.7*	*23.3*	*-8.3*	*4.0*
France	*-4.2*	*-4.9*	*29.9*	*-22.6*	*-10.9*	*10.3*	*9.3*	*5.0*	*-19.6*	*10.1*
Germany	*-16.8*	*-24.2*	*78.4*	*-28.5*	*-16.1*	*18.6*	*12.5*	*9.9*	*-5.0*	*3.7*
Italy	*-7.4*	*1.5*	*38.5*	*-13.7*	*-19.6*	*9.0*	*-0.9*	*22.2*	*-16.7*	*-8.4*
Netherlands	*23.1*	*-6.4*	*-25.8*	*21.3*	*5.1*	*2.3*	*42.6*	*-7.5*	*22.7*	*9.8*
Pacific Rim	-23.4	3.5	13.4	-18.4	-0.8	1.6	12.6	8.1	11.9	-4.9
Hong Kong	*-24.1*	*1.3*	*4.8*	*-21.6*	*-4.6*	*-13.4*	*40.2*	*-15.5*	*-6.5*	*-16.4*
Mainland China	*2.0*	*27.2*	*21.3*	*2.9*	*4.1*	*21.6*	*33.3*	*8.2*	*12.1*	*17.4*
Japan	*-24.4*	*-1.6*	*9.5*	*-16.9*	*-5.1*	*-5.1*	*4.0*	*9.4*	*13.0*	*-12.8*
South Korea	*-30.3*	*12.7*	*21.4*	*-20.4*	*1.8*	*7.2*	*17.0*	*28.4*	*16.9*	*-4.2*
Taiwan	*-19.0*	*0.8*	*14.3*	*-21.7*	*7.8*	*27.6*	*12.4*	*2.5*	*4.4*	*-11.2*
All Other Countries	-13.3	-5.5	24.9	6.0	-3.8	14.6	20.2	27.9	13.2	-9.1
Total Growth	**-2.8**	**12.0**	**15.8**	**-5.8**	**-9.0**	**-2.0**	**9.7**	**10.2**	**-2.0**	**-5.8**

1. High technology exports reflect exports of high technology commodities produced by the manufacturing portion of the high technology sector; exports from the high technology service industries are not included.

[r] Revised
[p] Preliminary

Source: BC Stats and Statistics Canada

Table 27. Imports of High Technology, by Country of Origin, 1997-2007

Value ($000,000)

	1997r	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
United States	2,077.6	2,281.4	2,369.1	2,484.3	2,106.7	1,897.5	1,726.5	1,668.4	1,628.9	1,489.6	1,610.0
Mexico	84.3	88.3	128.8	163.1	184.0	216.6	227.8	285.4	334.4	417.0	493.9
European Union	506.0	494.6	654.7	626.4	865.5	762.6	495.2	426.3	376.8	413.6	416.3
United Kingdom	*88.5*	*101.9*	*154.9*	*314.1*	*162.3*	*151.8*	*141.5*	*128.9*	*105.9*	*103.7*	*107.1*
France	*283.8*	*242.9*	*333.2*	*120.8*	*441.8*	*316.4*	*128.7*	*83.2*	*50.5*	*69.5*	*69.9*
Germany	*47.3*	*56.2*	*69.8*	*70.7*	*113.9*	*89.7*	*76.7*	*89.8*	*90.9*	*95.1*	*92.6*
Italy	*13.3*	*13.5*	*11.4*	*11.8*	*38.1*	*69.0*	*38.0*	*24.3*	*15.4*	*23.7*	*19.7*
Netherlands	*6.7*	*7.6*	*8.3*	*13.3*	*17.0*	*31.0*	*12.8*	*12.9*	*14.4*	*9.3*	*17.1*
Pacific Rim	827.6	910.4	1,007.2	1,122.0	823.0	908.2	1,117.1	1,342.7	1,493.2	1,661.4	1,857.1
Hong Kong	*20.4*	*17.5*	*24.5*	*27.7*	*10.8*	*10.0*	*10.8*	*6.8*	*9.5*	*11.1*	*11.5*
Mainland China	*46.0*	*53.5*	*73.2*	*101.7*	*131.8*	*202.2*	*339.4*	*513.7*	*668.4*	*833.7*	*951.8*
Japan	*301.1*	*316.9*	*336.8*	*359.1*	*246.5*	*241.3*	*242.7*	*254.2*	*272.8*	*235.9*	*247.4*
South Korea	*79.9*	*75.7*	*88.2*	*118.8*	*82.6*	*75.5*	*122.7*	*135.7*	*134.6*	*111.2*	*110.3*
Taiwan	*122.9*	*160.6*	*185.1*	*180.8*	*139.6*	*138.9*	*118.1*	*124.7*	*117.9*	*124.8*	*163.6*
All Other Countries	127.7	155.5	236.7	307.1	302.2	260.2	183.6	202.7	286.1	245.3	304.9
Total Value	**3,623.2**	**3,930.3**	**4,396.6**	**4,702.9**	**4,281.3**	**4,045.1**	**3,750.2**	**3,925.5**	**4,119.5**	**4,227.0**	**4,682.2**

% change from previous year

	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
United States	9.8	3.8	4.9	-15.2	-9.9	-9.0	-3.4	-2.4	-8.6	8.1
Mexico	4.7	45.9	26.6	12.8	17.8	5.2	25.3	17.2	24.7	18.4
European Union	-2.3	32.4	-4.3	38.2	-11.9	-35.1	-13.9	-11.6	9.8	0.6
United Kingdom	*15.1*	*52.0*	*102.8*	*-48.3*	*-6.5*	*-6.7*	*-8.9*	*-17.8*	*-2.1*	*3.3*
France	*-14.4*	*37.1*	*-63.7*	*265.7*	*-28.4*	*-59.3*	*-35.4*	*-39.3*	*37.6*	*0.6*
Germany	*18.8*	*24.2*	*1.2*	*61.2*	*-21.3*	*-14.4*	*17.1*	*1.2*	*4.6*	*-2.6*
Italy	*1.4*	*-15.5*	*3.9*	*222.4*	*81.1*	*-45.0*	*-36.1*	*-36.6*	*54.2*	*-16.9*
Netherlands	*13.5*	*9.2*	*59.9*	*27.9*	*82.7*	*-58.8*	*0.7*	*11.7*	*-35.3*	*84.0*
Pacific Rim	10.0	10.6	11.4	-26.7	10.4	23.0	20.2	11.2	11.3	11.8
Hong Kong	*-14.0*	*39.6*	*13.2*	*-61.0*	*-8.0*	*8.3*	*-36.5*	*38.5*	*16.8*	*4.1*
Mainland China	*16.3*	*36.9*	*38.9*	*29.6*	*53.4*	*67.8*	*51.4*	*30.1*	*24.7*	*14.2*
Japan	*5.3*	*6.3*	*6.6*	*-31.3*	*-2.1*	*0.6*	*4.8*	*7.3*	*-13.5*	*4.8*
South Korea	*-5.3*	*16.5*	*34.7*	*-30.5*	*-8.5*	*62.4*	*10.6*	*-0.8*	*-17.4*	*-0.8*
Taiwan	*30.6*	*15.3*	*-2.3*	*-22.8*	*-0.5*	*-15.0*	*5.6*	*-5.5*	*5.8*	*31.2*
All Other Countries	21.8	52.2	29.8	-1.6	-13.9	-29.5	10.4	41.1	-14.3	24.3
Total Growth	**8.5**	**11.9**	**7.0**	**-9.0**	**-5.5**	**-7.3**	**4.7**	**4.9**	**2.6**	**10.8**

r Revised
p Preliminary

Source: BC Stats

Table 28. Balance of Trade in High Technology Goods, by Country, 1997-2007

Balance ($000,000)

	1997r	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
United States	-1,471.3	-1,430.3	-1,291.7	-912.5	-1,238.5	-1,103.9	-998.4	-928.3	-896.1	-673.0	-937.8
Mexico	-83.6	-87.2	-125.5	-162.1	-182.8	-213.0	-224.1	-278.4	-326.3	-406.5	-481.9
European Union	-463.6	-426.5	-581.9	-514.7	-747.0	-680.9	-408.3	-316.6	-242.3	-217.1	-247.9
United Kingdom	*-77.5*	*-92.4*	*-144.7*	*-289.0*	*-118.5*	*-119.6*	*-111.0*	*-87.6*	*-70.9*	*-74.3*	*-81.6*
France	*-276.0*	*-234.1*	*-317.6*	*-103.5*	*-435.9*	*-311.1*	*-123.5*	*-70.2*	*-40.6*	*-40.1*	*-63.9*
Germany	*-40.8*	*-41.1*	*-61.0*	*-54.9*	*-105.6*	*-76.3*	*-63.8*	*-75.6*	*-60.4*	*-51.0*	*-34.7*
Italy	*-12.5*	*-10.7*	*-8.9*	*6.7*	*-3.7*	*-64.8*	*-34.0*	*-19.1*	*-5.9*	*-0.9*	*2.5*
Netherlands	*1.7*	*4.6*	*1.8*	*-8.2*	*-11.7*	*-27.9*	*-7.0*	*-6.2*	*0.3*	*5.7*	*1.6*
Pacific Rim	-683.1	-776.0	-864.4	-903.3	-713.0	-803.8	-953.9	-1,103.7	-1,191.0	-1,384.4	-1,600.7
Hong Kong	*7.6*	*30.8*	*7.1*	*30.2*	*30.6*	*14.1*	*27.7*	*41.8*	*69.7*	*45.1*	*31.8*
Mainland China	*-25.7*	*-25.6*	*-54.1*	*-88.9*	*-121.6*	*-194.8*	*-307.1*	*-484.8*	*-632.7*	*-800.6*	*-903.1*
Japan	*-273.3*	*-301.6*	*-319.7*	*-287.2*	*-221.2*	*-204.4*	*-213.3*	*-220.4*	*-222.6*	*-192.2*	*-211.1*
South Korea	*-58.6*	*-67.8*	*-66.2*	*-99.8*	*-71.9*	*-66.2*	*-113.4*	*-113.4*	*-117.6*	*-91.2*	*-95.7*
Taiwan	*-109.4*	*-140.2*	*-157.1*	*-171.7*	*-133.7*	*-133.6*	*-110.2*	*-115.0*	*-100.9*	*-109.7*	*-152.5*
All Other Countries	-105.1	-136.9	-211.1	-272.7	-264.5	-234.6	-144.3	-134.7	-189.4	-145.3	-184.0
Total	**-2,806.8**	**-2,856.9**	**-3,074.5**	**-2,765.4**	**-3,145.9**	**-3,036.1**	**-2,729.0**	**-2,761.7**	**-2,845.2**	**-2,826.3**	**-3,452.3**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

r Revised
p Preliminary

Source: BC Stats

Table 29. Domestic Exports of High Technology Goods, by Commodity Group, 1997-2007

Value ($000,000)

	1997	1998	1999	2000	2001	2002	2003	2004r	2005r	2006r	2007p
Biotechnology	1.0	2.2	2.4	1.5	1.6	1.7	2.0	4.3	7.9	7.2	4.4
Life Sciences	46.0	55.3	69.4	82.0	94.8	186.2	200.8	210.6	140.2	179.4	132.7
Opto-Electronics	35.6	51.4	91.5	167.5	121.1	70.9	35.3	34.0	35.7	37.1	49.9
Computers and Telecommunications	374.3	443.2	399.9	318.6	259.8	262.3	243.1	259.4	286.4	345.4	403.7
Electronics	17.1	13.0	9.5	14.2	18.1	4.6	4.1	8.9	15.4	14.1	6.4
Computer Integrated Manufacturing	37.4	40.8	44.5	51.6	56.3	47.5	62.5	97.5	104.1	101.0	94.0
Material Design	13.7	57.7	94.0	178.6	71.0	3.2	1.5	1.4	1.9	2.1	2.7
Aerospace	52.4	101.2	126.6	102.9	118.9	104.5	83.9	69.1	109.6	170.5	183.0
Weapons and Nuclear	4.0	4.4	2.3	6.3	6.5	3.9	2.0	1.4	4.1	0.1	0.4
Total	**581.4**	**769.2**	**840.1**	**923.1**	**748.1**	**684.6**	**635.2**	**686.6**	**705.1**	**857.0**	**877.1**

% change from previous year

	1998	1999	2000	2001	2002	2003	2004r	2005r	2006r	2007p
Biotechnology	128.5	8.9	-37.9	5.0	5.7	19.6	112.0	84.4	-8.5	-39.1
Life Sciences	20.3	25.5	18.1	15.7	96.3	7.8	4.9	-33.4	28.0	-26.0
Opto-Electronics	44.4	78.0	82.9	-27.7	-41.5	-50.3	-3.6	4.9	4.1	34.3
Computers and Telecommunications	18.4	-9.8	-20.3	-18.5	0.9	-7.3	6.7	10.4	20.6	16.9
Electronics	-23.8	-26.8	48.5	27.6	-74.7	-9.7	114.3	72.9	-8.4	-54.5
Computer Integrated Manufacturing	9.1	9.1	15.9	9.2	-15.7	31.6	56.1	6.7	-3.0	-7.0
Material Design	321.9	63.0	90.0	-60.3	-95.5	-53.1	-2.5	29.5	13.5	27.1
Aerospace	93.2	25.1	-18.7	15.6	-12.1	-19.7	-17.7	58.7	55.6	7.3
Weapons and Nuclear	10.2	-47.8	178.5	2.0	-40.2	-48.1	-29.9	191.0	-96.5	190.4
Total	**32.3**	**9.2**	**9.9**	**-19.0**	**-8.5**	**-7.2**	**8.1**	**2.7**	**21.5**	**2.4**

r Revised
p Preliminary

Source: BC Stats

Table 30. Imports of High Technology Goods, by Commodity Group, 1997-2007

Value ($000,000)

	1997r	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
Biotechnology	21.6	32.5	34.6	36.6	56.5	50.3	44.7	34.3	36.6	45.4	59.6
Life Sciences	240.6	276.1	331.6	404.6	460.9	484.2	464.2	466.1	468.7	480.2	509.3
Opto-Electronics	96.3	97.3	94.4	135.7	127.6	117.1	106.3	126.6	181.6	275.1	304.6
Computers and Telecommunications	1,940.3	2,122.6	2,128.6	2,305.7	2,051.4	2,148.6	2,255.0	2,513.4	2,545.9	2,577.7	2,797.6
Electronics	545.2	680.0	834.3	924.8	272.2	194.1	174.0	185.9	197.7	187.6	183.2
Computer Integrated Manufacturing	183.3	134.2	150.2	185.8	179.9	191.0	204.9	187.4	178.4	170.5	154.4
Material Design	33.2	62.5	145.8	101.9	62.3	27.8	20.0	19.8	19.3	19.2	20.3
Aerospace	532.7	501.0	653.7	572.0	1,030.3	800.2	449.4	352.6	474.8	449.2	633.0
Weapons and Nuclear	30.2	24.0	23.4	35.7	40.2	31.9	31.7	39.3	16.5	22.0	20.2
Total	**3,623.2**	**3,930.3**	**4,396.6**	**4,702.9**	**4,281.3**	**4,045.1**	**3,750.2**	**3,925.5**	**4,119.5**	**4,227.0**	**4,682.2**

% change from previous year

	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
Biotechnology	50.6	6.5	5.8	54.4	-10.9	-11.1	-23.3	6.7	24.1	31.2
Life Sciences	14.8	20.1	22.0	13.9	5.0	-4.1	0.4	0.6	2.5	6.0
Opto-Electronics	1.1	-3.0	43.8	-5.9	-8.2	-9.2	19.1	43.4	51.5	10.7
Computers and Telecommunications	9.4	0.3	8.3	-11.0	4.7	5.0	11.5	1.3	1.3	8.5
Electronics	24.7	22.7	10.9	-70.6	-28.7	-10.3	6.9	6.3	-5.1	-2.3
Computer Integrated Manufacturing	-26.8	12.0	23.7	-3.2	6.2	7.3	-8.5	-4.8	-4.4	-9.5
Material Design	88.5	133.2	-30.1	-38.9	-55.3	-28.1	-1.0	-2.6	-0.2	5.6
Aerospace	-5.9	30.5	-12.5	80.1	-22.3	-43.8	-21.5	34.7	-5.4	40.9
Weapons and Nuclear	-20.4	-2.7	52.7	12.5	-20.6	-0.7	24.1	-58.1	33.6	-8.3
Total	**8.5**	**11.9**	**7.0**	**-9.0**	**-5.5**	**-7.3**	**4.7**	**4.9**	**2.6**	**10.8**

r Revised
p Preliminary

Source: BC Stats

Table 31. Balance of Trade in High Technology Goods, by Commodity Group, 1997-2007

Balance ($000,000)

	1997r	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
Biotechnology	-20.6	-30.2	-32.1	-35.1	-54.8	-48.6	-42.7	-30.0	-28.6	-38.2	-55.2
Life Sciences	-193.1	-219.1	-259.2	-319.6	-363.5	-293.9	-257.7	-248.0	-319.1	-294.3	-370.9
Opto-Electronics	-58.1	-44.9	-1.2	34.5	-3.0	-42.8	-69.5	-89.8	-142.1	-234.0	-252.8
Computers and Telecommunications	-1,487.2	-1,611.6	-1,662.8	-1,905.7	-1,715.6	-1,807.6	-1,936.1	-2,180.0	-2,167.2	-2,123.1	-2,335.1
Electronics	-413.7	-455.1	-460.0	-42.7	9.8	-4.2	67.9	126.0	164.1	157.2	13.6
Computer Integrated Manufacturing	-143.7	-91.0	-102.7	-126.1	-115.4	-138.9	-133.0	-79.0	-64.3	-55.3	-53.7
Material Design	-19.5	-4.8	-51.6	77.0	13.3	-22.9	-16.6	-18.0	-15.4	-15.9	-16.7
Aerospace	-445.1	-382.4	-485.3	-420.5	-883.5	-650.2	-312.5	-208.3	-260.8	-201.6	-362.7
Weapons and Nuclear	-25.8	-17.8	-19.6	-27.2	-33.1	-27.1	-28.9	-34.6	-11.6	-21.2	-18.9
Total	**-2,806.8**	**-2,856.9**	**-3,074.5**	**-2,765.4**	**-3,145.9**	**-3,036.1**	**-2,729.0**	**-2,761.7**	**-2,845.2**	**-2,826.3**	**-3,452.3**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

r Revised
p Preliminary

Source: BC Stats

Table 32. Domestic Exports of High Technology Goods to the United States, by Commodity Group, 1997-2007

Value ($000,000)

	1997	1998	1999	2000	2001	2002	2003	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	0.6	0.7	0.7	0.6	1.5	1.6	1.4	1.8	3.3	2.0	1.6
Life Sciences	40.0	45.4	59.6	71.5	85.8	167.6	174.5	172.3	103.4	124.1	79.7
Opto-Electronics	24.7	40.5	77.5	135.3	89.8	54.2	25.3	22.1	19.9	18.7	21.9
Computers and Telecommunications	244.7	314.8	285.0	250.9	206.7	219.0	186.4	197.4	204.2	230.1	282.8
Electronics	10.3	7.5	6.7	9.9	14.4	2.3	2.5	3.2	4.0	3.7	2.6
Computer Integrated Manufacturing	29.6	32.2	35.7	40.9	49.5	39.0	45.4	56.1	62.4	58.3	57.9
Material Design	13.7	57.3	93.9	178.3	50.3	3.1	1.2	1.3	1.5	0.9	0.6
Aerospace	47.3	94.2	120.2	83.9	92.5	70.0	69.1	54.5	88.2	150.0	156.4
Weapons and Nuclear	3.5	4.0	0.8	1.7	6.0	1.3	0.8	0.4	0.2	0.1	0.3
Total	**414.4**	**596.6**	**680.0**	**773.0**	**596.4**	**558.1**	**506.6**	**509.2**	**487.1**	**587.8**	**603.8**

% change from previous year

	1998	1999	2000	2001	2002	2003	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	10.5	2.3	-9.6	135.6	7.8	-12.9	32.6	83.2	-40.3	-18.9
Life Sciences	13.4	31.4	20.0	19.9	95.5	4.1	-1.3	-40.0	20.1	-35.8
Opto-Electronics	64.0	91.2	74.6	-33.6	-39.7	-53.4	-12.5	-10.1	-6.1	17.2
Computers and Telecommunications	28.6	-9.5	-12.0	-17.6	6.0	-14.9	5.9	3.4	12.7	22.9
Electronics	-27.5	-10.4	48.4	45.3	-84.1	8.9	29.0	25.4	-9.0	-29.9
Computer Integrated Manufacturing	8.8	10.8	14.6	21.1	-21.2	16.5	23.5	11.1	-6.5	-0.7
Material Design	319.3	63.9	89.9	-71.8	-93.8	-63.2	13.6	14.6	-41.6	-27.8
Aerospace	99.1	27.6	-30.2	10.3	-24.4	-1.2	-21.1	61.8	70.0	4.3
Weapons and Nuclear	16.5	-79.7	101.3	261.3	-78.5	-37.2	-50.2	-43.1	-54.3	181.1
Total	**44.0**	**14.0**	**13.7**	**-22.8**	**-6.4**	**-9.2**	**0.5**	**-4.3**	**20.7**	**2.7**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 33. Imports of High Technology Goods from the United States, by Commodity Group, 1997-2007

Value ($000,000)

	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	11.2	17.2	22.1	17.6	21.4	21.9	20.9	17.5	17.5	20.6	23.2
Life Sciences	134.4	162.1	196.0	247.7	262.6	282.6	258.9	252.5	237.7	236.2	256.9
Opto-Electronics	50.2	50.7	48.1	67.1	57.9	48.3	32.5	36.6	30.2	36.3	23.9
Computers and Telecommunications	1,220.0	1,342.0	1,216.3	1,227.7	1,020.7	967.1	925.2	920.8	874.1	751.8	736.0
Electronics	253.3	312.2	363.2	406.3	131.7	100.3	85.0	87.5	101.2	75.9	76.6
Computer Integrated Manufacturing	139.6	99.9	113.0	131.9	123.7	128.6	131.3	116.1	98.4	103.4	86.3
Material Design	29.5	56.8	130.2	78.9	38.3	21.3	14.3	13.5	12.8	12.7	12.3
Aerospace	220.2	225.3	265.3	285.1	425.8	305.7	236.7	199.6	248.6	240.6	382.9
Weapons and Nuclear	19.1	15.3	14.8	21.9	24.7	21.7	21.7	24.2	8.4	12.2	11.9
Total	**2,077.6**	**2,281.4**	**2,369.1**	**2,484.3**	**2,106.7**	**1,897.5**	**1,726.5**	**1,668.4**	**1,628.9**	**1,489.6**	**1,610.0**

% change from previous year

	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	53.3	28.2	-20.4	21.5	2.4	-4.5	-16.2	-0.4	17.7	12.7
Life Sciences	20.6	21.0	26.4	6.0	7.6	-8.4	-2.5	-5.9	-0.7	8.8
Opto-Electronics	1.0	-5.0	39.6	-13.7	-16.6	-32.8	12.6	-17.5	20.3	-34.2
Computers and Telecommunications	10.0	-9.4	0.9	-16.9	-5.2	-4.3	-0.5	-5.1	-14.0	-2.1
Electronics	23.3	16.3	11.9	-67.6	-23.8	-15.2	2.9	15.6	-25.0	1.0
Computer Integrated Manufacturing	-28.5	13.2	16.7	-6.2	4.0	2.1	-11.5	-15.3	5.1	-16.6
Material Design	92.5	129.3	-39.4	-51.4	-44.5	-32.5	-6.1	-4.7	-1.2	-3.1
Aerospace	2.3	17.8	7.5	49.4	-28.2	-22.6	-15.7	24.5	-3.2	59.2
Weapons and Nuclear	-20.2	-2.8	47.6	12.6	-12.0	-0.2	11.8	-65.2	45.0	-2.8
Total	**9.8**	**3.8**	**4.9**	**-15.2**	**-9.9**	**-9.0**	**-3.4**	**-2.4**	**-8.6**	**8.1**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 34. Balance of Trade in High Technology Goods with the United States, by Commodity Group, 1997-2007

Balance ($000,000)

	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	-10.6	-16.6	-21.4	-17.0	-19.9	-20.3	-19.5	-15.7	-14.0	-18.6	-21.6
Life Sciences	-93.4	-115.2	-133.7	-173.3	-174.6	-111.8	-80.5	-74.7	-129.2	-107.5	-175.8
Opto-Electronics	-23.6	-9.1	30.8	70.5	35.0	8.0	-6.1	-12.3	-7.2	-15.0	-1.2
Computers and Telecommunications	-910.9	-969.2	-876.8	-909.6	-748.0	-679.3	-679.0	-662.8	-599.4	-433.3	-418.9
Electronics	-150.2	-128.3	-54.5	288.9	57.0	27.7	24.5	53.2	38.9	35.1	-53.5
Computer Integrated Manufacturing	-107.9	-65.4	-74.4	-83.0	-66.3	-85.3	-77.3	-52.2	-29.1	-36.5	-25.3
Material Design	-15.8	0.6	-36.1	99.8	14.5	-16.5	-11.5	-11.9	-11.1	-11.2	-11.4
Aerospace	-143.7	-117.6	-112.7	-170.2	-318.2	-206.9	-128.3	-128.3	-136.9	-74.0	-218.7
Weapons and Nuclear	-15.3	-9.5	-12.8	-18.5	-18.1	-19.6	-20.7	-23.6	-8.0	-11.9	-11.4
Total	**-1,471.3**	**-1,430.3**	**-1,291.7**	**-912.5**	**-1,238.5**	**-1,103.9**	**-998.4**	**-928.3**	**-896.1**	**-673.0**	**-937.8**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

[r] Revised
[p] Preliminary

Source: BC Stats

Table 35. Domestic Exports of High Technology Goods to the Pacific Rim, by Commodity Group, 1997-2007

Value ($000,000)

	1997	1998	1999	2000	2001	2002	2003	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.5	0.7	0.1	0.1
Life Sciences	2.8	2.6	3.5	4.0	2.8	1.9	4.9	7.7	13.1	13.0	6.6
Opto-Electronics	1.6	1.3	2.3	11.9	4.3	11.0	4.4	4.8	8.7	5.1	4.5
Computers and Telecommunications	98.7	80.4	68.7	37.8	18.4	14.5	20.1	29.4	39.9	45.1	38.5
Electronics	4.4	3.8	2.1	3.2	2.6	1.7	1.1	3.2	10.3	9.3	3.1
Computer Integrated Manufacturing	4.6	5.8	5.3	5.3	3.4	3.4	6.8	14.4	14.7	15.9	9.0
Material Design	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.3
Aerospace	2.3	2.1	1.5	2.2	1.6	13.1	4.0	6.0	6.2	5.0	12.5
Weapons and Nuclear	0.4	0.1	0.4	2.0	0.1	1.7	0.9	0.3	3.8	0.0	0.1
Total	**114.6**	**96.1**	**83.8**	**66.8**	**33.3**	**47.2**	**42.3**	**66.3**	**97.4**	**93.7**	**74.7**

% change from previous year

	1998	1999	2000	2001	2002	2003	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	-	42.5	1624.6	-91.7	-77.4	2547.2	235.8	46.5	-81.9	-13.4
Life Sciences	-5.0	33.7	15.2	-30.3	-33.0	159.8	57.7	68.9	-0.5	-49.2
Opto-Electronics	-16.0	75.7	418.2	-64.2	157.3	-60.2	9.2	82.0	-41.0	-11.7
Computers and Telecommunications	-18.6	-14.4	-45.0	-51.3	-21.3	38.9	46.2	35.8	12.8	-14.6
Electronics	-13.6	-45.7	54.5	-20.1	-35.2	-35.3	194.3	225.9	-9.4	-66.9
Computer Integrated Manufacturing	26.7	-8.4	0.0	-35.2	-1.6	101.2	112.3	2.1	8.6	-43.8
Material Design	2707.5	-100.0	-	830.4	-96.5	642.9	19.5	-43.4	323.2	190.3
Aerospace	-10.0	-28.5	49.8	-26.3	699.1	-69.2	47.9	4.2	-19.9	152.6
Weapons and Nuclear	-82.8	563.3	390.5	-96.6	2424.9	-50.2	-60.2	1003.7	-99.4	161.0
Total	**-16.1**	**-12.8**	**-20.3**	**-50.1**	**41.5**	**-10.3**	**56.6**	**46.9**	**-3.8**	**-20.2**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 36. Imports of High Technology Goods from the Pacific Rim, by Commodity Group, 1997-2007

Value ($000,000)

	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	0.3	1.3	2.2	3.3	1.9	1.3	1.4	1.1	0.8	0.8	1.0
Life Sciences	16.1	15.4	22.2	23.0	33.4	29.1	29.6	35.6	36.9	37.4	42.1
Opto-Electronics	41.2	41.3	40.4	58.1	56.3	53.4	59.3	71.7	98.1	108.0	71.3
Computers and Telecommunications	532.1	573.0	603.7	612.2	580.6	713.1	912.4	1,113.6	1,219.9	1,372.1	1,598.1
Electronics	206.7	243.2	289.1	358.7	94.0	65.4	62.0	68.7	69.0	81.2	78.0
Computer Integrated Manufacturing	22.1	18.5	20.5	29.1	25.0	26.5	36.8	31.3	42.2	30.3	34.1
Material Design	1.4	1.9	9.0	10.5	10.4	2.0	1.6	1.5	1.9	2.3	2.2
Aerospace	6.1	14.3	18.7	25.4	19.2	15.4	11.7	16.8	22.7	27.4	28.4
Weapons and Nuclear	1.6	1.4	1.4	1.6	2.1	1.9	2.3	2.3	1.8	1.9	1.9
Total	**827.6**	**910.4**	**1,007.2**	**1,122.0**	**823.0**	**908.2**	**1,117.1**	**1,342.7**	**1,493.2**	**1,661.4**	**1,857.1**

% change from previous year

	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	308.8	66.8	48.3	-41.2	-31.9	6.8	-19.1	-32.6	3.1	28.5
Life Sciences	-4.4	44.3	3.6	45.0	-12.8	1.6	20.4	3.6	1.3	12.6
Opto-Electronics	0.4	-2.3	43.9	-3.1	-5.3	11.1	20.9	36.8	10.1	-34.0
Computers and Telecommunications	7.7	5.4	1.4	-5.2	22.8	27.9	22.1	9.6	12.5	16.5
Electronics	17.6	18.9	24.1	-73.8	-30.4	-5.3	10.9	0.3	17.8	-3.9
Computer Integrated Manufacturing	-16.2	10.5	42.1	-14.1	6.1	38.9	-15.0	34.7	-28.2	12.7
Material Design	39.8	367.2	17.0	-0.8	-80.5	-19.2	-7.6	25.5	19.6	-5.4
Aerospace	133.7	30.2	35.7	-24.2	-19.8	-24.2	43.2	35.3	21.1	3.4
Weapons and Nuclear	-13.1	2.6	14.2	27.2	-7.3	18.2	2.7	-21.9	5.4	0.6
Total	**10.0**	**10.6**	**11.4**	**-26.7**	**10.4**	**23.0**	**20.2**	**11.2**	**11.3**	**11.8**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 37. Balance of Trade in High Technology Goods with the Pacific Rim, by Commodity Group, 1997-2007

Balance ($000,000)

	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	-0.3	-1.3	-2.2	-3.0	-1.9	-1.3	-1.3	-0.7	-0.1	-0.7	-0.9
Life Sciences	-12.9	-12.7	-18.5	-18.8	-30.4	-26.8	-23.7	-26.8	-23.3	-23.3	-34.0
Opto-Electronics	-39.3	-40.0	-38.1	-46.2	-52.0	-42.3	-54.9	-66.7	-89.1	-102.8	-66.1
Computers and Telecommunications	-422.3	-485.1	-528.0	-571.6	-558.7	-695.3	-883.7	-1,079.3	-1,173.4	-1,318.3	-1,551.7
Electronics	-187.4	-210.5	-238.2	-210.4	-22.5	-12.7	45.4	64.2	110.1	91.3	73.2
Computer Integrated Manufacturing	-17.5	-12.7	-15.1	-23.8	-21.5	-23.0	-29.6	-14.6	-26.0	-13.3	-22.1
Material Design	-1.4	-1.8	-9.0	-10.5	-8.2	-2.0	-1.6	-1.4	-1.6	-1.8	-1.8
Aerospace	-0.7	-10.6	-14.4	-19.7	-15.8	-0.3	-3.3	23.6	10.3	-13.5	4.5
Weapons and Nuclear	-1.2	-1.3	-0.9	0.5	-2.0	-0.2	-1.3	-2.0	2.0	-1.9	-1.8
Total	**-683.1**	**-776.0**	**-864.4**	**-903.3**	**-713.0**	**-803.8**	**-953.9**	**-1,103.7**	**-1,191.0**	**-1,384.4**	**-1,600.7**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

[r] Revised
[p] Preliminary

Source: BC Stats

Table 38. Domestic Exports of High Technology Goods to Mainland China, by Commodity Group, 1997-2007

Value ($000,000)

	1997	1998	1999	2000	2001	2002	2003	2004r	2005r	2006r	2007p
Biotechnology	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life Sciences	0.1	0.4	0.2	0.4	1.5	0.8	3.0	2.0	6.2	6.3	2.8
Opto-Electronics	0.4	0.1	0.1	0.0	0.2	0.1	0.2	0.1	0.3	0.2	1.0
Computers and Telecommunications	19.1	22.8	17.1	1.5	1.2	1.9	4.6	9.4	11.9	8.4	8.8
Electronics	0.0	0.0	0.0	0.1	0.0	0.2	0.4	0.2	1.4	0.2	0.3
Computer Integrated Manufacturing	0.5	3.8	0.2	0.1	0.1	1.0	1.5	2.4	3.3	2.4	1.6
Material Design	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Aerospace	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.2	0.5
Weapons and Nuclear	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1
Total	**20.1**	**27.1**	**17.7**	**2.3**	**3.0**	**4.1**	**10.3**	**14.5**	**23.3**	**17.6**	**15.1**

% change from previous year

	1998	1999	2000	2001	2002	2003	2004r	2005r	2006r	2007p
Biotechnology	-	-	-	-100.0	-	-	302.7	116.4	80.9	-100.0
Life Sciences	387.2	-45.7	66.3	281.7	-44.6	267.8	-32.3	207.3	1.3	-55.3
Opto-Electronics	-74.5	-18.6	-41.3	269.7	-32.1	31.1	-22.5	137.0	-39.5	435.0
Computers and Telecommunications	19.7	-25.1	-91.1	-22.1	63.0	136.7	105.9	26.6	-29.4	5.2
Electronics	-100.0	-	89.9	-84.1	2111.9	49.8	-48.5	645.3	-87.3	102.2
Computer Integrated Manufacturing	624.4	-95.0	-57.0	-16.0	1298.3	62.2	53.7	37.9	-27.7	-33.0
Material Design	-	-	-	-	-99.1	-100.0	-	-100.0	-	-97.1
Aerospace	-100.0	-	-	-100.0	-	256.6	458.3	-30.4	-20.0	173.7
Weapons and Nuclear	-	-	-100.0	-	24093.5	4179.1	-95.6	-100.0	-	373.2
Total	**34.9**	**-34.9**	**-87.0**	**29.5**	**36.6**	**152.5**	**40.5**	**60.8**	**-24.1**	**-14.5**

r Revised
p Preliminary
Source: BC Stats

Table 39. Imports of High Technology Goods from Mainland China, by Commodity Group, 1997-2007

Value ($000,000)

	1997r	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
Biotechnology	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
Life Sciences	2.8	2.7	4.6	5.2	7.6	8.3	8.2	9.6	6.5	6.0	7.5
Opto-Electronics	6.0	7.9	7.6	11.9	19.3	23.2	28.0	37.4	59.9	69.6	54.2
Computers and Telecommunications	34.7	39.8	56.5	77.8	99.4	165.1	296.3	457.0	589.7	743.1	873.4
Electronics	1.3	1.8	2.9	4.4	1.3	1.9	3.0	5.1	6.1	7.4	8.4
Computer Integrated Manufacturing	0.6	0.8	0.8	1.0	1.3	2.1	1.7	2.5	3.5	4.6	4.7
Material Design	0.0	0.0	0.1	0.3	1.4	0.3	0.4	0.5	0.9	1.1	1.0
Aerospace	0.3	0.3	0.3	0.5	0.6	0.5	0.8	0.8	1.0	1.3	1.6
Weapons and Nuclear	0.2	0.3	0.3	0.5	0.7	0.6	0.9	0.8	0.6	0.6	0.8
Total	**46.0**	**53.5**	**73.2**	**101.7**	**131.8**	**202.2**	**339.4**	**513.7**	**668.4**	**833.7**	**951.8**

% change from previous year

	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
Biotechnology	154.7	51.3	137.5	10.4	99.4	-49.4	-31.0	74.4	-32.1	108.3
Life Sciences	-4.1	72.5	12.8	46.1	9.4	-0.7	16.9	-32.2	-8.9	25.5
Opto-Electronics	31.0	-3.2	55.9	62.2	20.2	20.7	33.5	60.3	16.1	-22.1
Computers and Telecommunications	14.9	42.0	37.6	27.8	66.1	79.4	54.2	29.1	26.0	17.5
Electronics	32.4	64.3	53.1	-70.7	49.2	53.8	70.0	21.0	21.1	13.9
Computer Integrated Manufacturing	17.8	10.1	19.3	34.4	57.5	-16.4	44.5	38.8	30.8	2.7
Material Design	20.1	242.6	462.6	387.2	-81.5	36.4	40.1	68.3	26.7	-10.1
Aerospace	-10.7	11.8	66.4	12.3	-24.3	62.3	7.1	25.6	28.6	24.8
Weapons and Nuclear	34.5	14.6	50.8	47.3	-11.9	38.6	-8.0	-21.1	-1.3	35.1
Total	**16.3**	**36.9**	**38.9**	**29.6**	**53.4**	**67.8**	**51.4**	**30.1**	**24.7**	**14.2**

r Revised
p Preliminary
Source: BC Stats

Table 40. Balance of Trade in High Technology Goods with Mainland China, by Commodity Group, 1997-2007

Balance ($000,000)

	1997r	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
Biotechnology	-2.8	-2.7	-4.6	-5.0	-7.6	-8.3	-8.2	-9.6	-6.5	-5.9	-7.5
Life Sciences	-5.9	-7.4	-7.4	-11.5	-17.7	-22.3	-25.0	-34.5	-53.7	-63.0	-51.2
Opto-Electronics	-34.3	-39.7	-56.4	-77.7	-99.3	-165.0	-296.2	-456.8	-589.4	-742.9	-872.0
Computers and Telecommunications	17.9	21.6	14.6	-1.7	-0.1	0.4	8.0	5.6	7.9	4.3	2.4
Electronics	-0.6	-0.8	-0.7	8.3	3.5	1.1	13.5	8.2	6.8	6.7	26.2
Computer Integrated Manufacturing	0.5	3.8	0.1	-0.2	-1.3	0.7	1.5	3.4	3.1	1.5	0.8
Material Design	-0.3	-0.3	-0.3	-0.5	1.5	-0.5	-0.8	-0.8	-1.0	-1.0	-1.6
Aerospace	-0.2	-0.2	0.6	-0.4	-0.4	-0.6	-0.5	-0.3	0.1	-0.3	-0.1
Weapons and Nuclear	-0.2	-0.3	-0.3	-0.5	-0.7	-0.6	-0.2	-0.8	-0.6	-0.6	-0.8
Total	**-25.7**	**-25.6**	**-54.1**	**-88.9**	**-121.6**	**-194.8**	**-307.1**	**-484.8**	**-632.7**	**-800.6**	**-903.1**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

r Revised
p Preliminary
Source: BC Stats

Table 41. Domestic Exports of High Technology Goods to Japan, by Commodity Group, 1997-2007

Value ($000,000)

	1997	1998	1999	2000	2001	2002	2003	2004r	2005r	2006r	2007p
Biotechnology	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.4	0.0	0.0
Life Sciences	1.2	0.9	1.5	2.3	0.6	0.5	0.8	1.4	1.7	2.1	0.4
Opto-Electronics	0.2	0.2	0.6	8.8	1.2	9.3	1.1	1.3	5.2	1.1	1.5
Computers and Telecommunications	15.2	5.5	1.9	16.5	6.2	2.6	3.1	4.2	5.7	11.3	8.3
Electronics	1.5	1.0	0.2	0.4	1.4	1.0	0.1	0.2	0.2	1.0	0.0
Computer Integrated Manufacturing	0.6	0.0	0.2	0.0	0.1	0.1	0.4	3.1	2.4	3.9	0.6
Material Design	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Aerospace	0.3	0.9	0.7	0.4	0.2	8.6	1.8	0.5	0.6	0.2	5.3
Weapons and Nuclear	0.3	0.0	0.1	1.9	0.0	0.0	0.0	0.2	3.8	0.0	0.0
Total	**19.3**	**8.6**	**5.2**	**30.4**	**9.7**	**22.0**	**7.3**	**11.1**	**20.0**	**19.7**	**16.1**

% change from previous year

	1998	1999	2000	2001	2002	2003	2004r	2005r	2006r	2007p
Biotechnology	-	-100.0	-	-100.0	-	-	326.3	52.1	-97.7	-100.0
Life Sciences	-23.8	66.5	53.1	-75.7	-10.5	60.3	73.0	27.8	18.9	-82.7
Opto-Electronics	-26.1	260.2	1343.6	-86.0	653.0	-88.5	18.3	306.6	-78.6	33.7
Computers and Telecommunications	-63.6	-66.2	784.3	-62.6	-58.1	21.0	34.6	36.6	97.2	-26.6
Electronics	-34.0	-84.6	173.8	225.9	-31.2	-93.3	153.6	-3.3	541.7	-95.5
Computer Integrated Manufacturing	-93.9	428.7	-99.7	9357.1	10.6	448.0	788.7	-23.8	62.1	-85.3
Material Design	-	-100.0	-	-	-100.0	-	20.7	-83.5	467.7	-34.0
Aerospace	199.2	-17.6	-50.0	-41.1	3770.8	-78.8	-73.6	15.5	-55.1	2047.2
Weapons and Nuclear	-95.3	1039.2	1247.7	-99.6	574.4	-0.9	215.1	2422.0	-99.8	0.0
Total	**-55.4**	**-39.5**	**483.0**	**-68.0**	**127.1**	**-66.6**	**50.5**	**80.8**	**-1.5**	**-18.1**

r Revised
p Preliminary
Source: BC Stats

Table 42. Imports of High Technology Goods from Japan, by Commodity Group, 1997-2007

Value ($000,000)

	1997r	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
Biotechnology	0.1	0.1	0.3	0.6	0.2	0.4	0.3	0.1	0.1	0.1	0.1
Life Sciences	7.5	8.6	11.0	11.2	16.2	14.5	14.4	16.9	20.6	22.0	20.4
Opto-Electronics	18.0	16.3	16.7	25.0	18.7	17.6	19.3	20.5	24.7	16.8	4.7
Computers and Telecommunications	198.8	204.6	196.4	177.0	145.8	160.5	156.0	171.4	168.6	145.5	165.2
Electronics	51.6	58.1	71.0	92.4	23.9	15.1	12.5	9.3	8.5	10.5	10.7
Computer Integrated Manufacturing	18.9	14.9	17.0	23.4	18.6	18.3	29.2	20.8	31.1	17.1	21.4
Material Design	1.3	1.5	7.3	6.0	5.6	1.2	0.9	0.6	0.5	0.8	0.8
Aerospace	4.0	12.4	16.8	22.7	16.3	12.8	9.4	13.6	18.1	22.6	23.4
Weapons and Nuclear	0.9	0.5	0.5	0.8	1.1	1.0	0.9	1.0	0.6	0.7	0.6
Total	**301.1**	**316.9**	**336.8**	**359.1**	**246.5**	**241.3**	**242.7**	**254.2**	**272.8**	**235.9**	**247.4**

% change from previous year

	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
Biotechnology	-43.8	243.0	136.9	-61.0	52.5	-27.0	-69.7	-29.6	25.1	37.5
Life Sciences	14.1	28.6	1.7	45.0	-10.8	-0.8	17.8	21.5	6.7	-7.0
Opto-Electronics	-9.2	2.2	49.9	-25.2	-5.9	9.6	6.5	20.3	-32.0	-71.8
Computers and Telecommunications	2.9	-4.0	-9.9	-17.6	10.0	-2.8	9.9	-1.7	-13.7	13.6
Electronics	12.7	22.2	30.1	-74.2	-36.5	-17.8	-25.6	-8.6	24.1	2.0
Computer Integrated Manufacturing	-21.3	13.9	38.1	-20.4	-2.0	59.6	-28.7	49.6	-45.0	25.3
Material Design	15.2	397.4	-17.2	-6.8	-79.4	-23.9	-31.1	-11.2	41.6	-0.6
Aerospace	209.6	35.8	34.7	-28.0	-21.4	-27.0	44.9	33.7	24.4	3.6
Weapons and Nuclear	-41.8	-11.2	66.7	43.5	-12.9	-3.5	10.1	-38.9	15.6	-9.8
Total	**5.3**	**5.3**	**5.6**	**-31.3**	**-2.1**	**0.6**	**4.8**	**7.3**	**-13.5**	**4.8**

r Revised
p Preliminary
Source: BC Stats

Table 43. Balance of Trade in High Technology Goods with Japan, by Commodity Group, 1997-2007

Balance ($000,000)

	1997r	1998r	1999r	2000r	2001r	2002r	2003r	2004r	2005r	2006r	2007p
Biotechnology	-7.5	-8.6	-11.0	-11.1	-16.2	-14.5	-14.3	-16.7	-20.2	-22.0	-20.4
Life Sciences	-16.8	-15.4	-15.1	-22.6	-18.1	-16.9	-18.0	-19.1	-22.7	-14.3	-3.9
Opto-Electronics	-198.4	-204.4	-195.8	-168.1	-144.6	-151.1	-154.9	-170.2	-163.3	-144.3	-163.7
Computers and Telecommunications	-31.4	-52.4	-69.0	-75.8	-16.9	-12.1	-8.7	-4.4	-1.9	1.2	-0.1
Electronics	-14.4	-8.4	-5.4	17.9	-2.6	-3.2	-8.3	1.2	-2.2	6.4	-4.3
Computer Integrated Manufacturing	-0.6	-1.4	-7.1	-6.0	-5.5	-1.1	-0.5	2.6	1.9	3.3	-0.2
Material Design	-4.0	-12.3	-16.8	-22.7	-16.3	-12.8	-9.3	-13.5	-18.1	-22.5	-23.4
Aerospace	-0.2	1.4	0.6	-0.1	-0.6	7.6	1.0	-0.4	0.3	0.1	5.0
Weapons and Nuclear	-0.6	-0.5	-0.3	1.2	-1.1	-0.9	-0.8	-0.9	3.2	-0.7	-0.6
Total	**-273.3**	**-301.6**	**-319.7**	**-287.2**	**-221.2**	**-204.4**	**-213.3**	**-220.4**	**-222.6**	**-192.2**	**-211.1**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

r Revised
p Preliminary
Source: BC Stats

Table 44. Domestic Exports of High Technology Goods to the European Union, by Commodity Group, 1997-2007

Value ($000,000)

	1997	1998	1999	2000	2001	2002	2003	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	0.1	1.3	0.1	0.0	0.0	0.1	0.3	1.0	1.4	0.8	1.1
Life Sciences	2.1	4.4	4.8	4.3	4.0	11.8	17.3	26.9	19.7	32.7	28.9
Opto-Electronics	5.4	7.1	8.7	17.3	24.4	3.4	3.0	3.2	3.6	5.4	18.1
Computers and Telecommunications	22.2	40.6	34.3	20.1	27.8	20.8	20.1	19.1	24.3	48.5	62.3
Electronics	1.1	1.2	0.7	0.8	1.1	0.4	0.2	2.0	0.3	0.6	0.6
Computer Integrated Manufacturing	1.2	0.7	1.1	1.4	0.9	1.1	2.3	8.6	10.5	11.0	8.5
Material Design	0.0	0.0	0.1	0.2	6.8	0.0	0.2	0.1	0.2	0.9	0.5
Aerospace	1.3	3.1	3.6	13.6	22.5	19.9	7.8	4.6	10.3	6.6	7.2
Weapons and Nuclear	0.0	0.3	1.0	2.5	0.3	0.8	0.3	0.2	0.0	0.0	0.0
Total	**33.4**	**58.7**	**54.2**	**60.3**	**87.8**	**58.3**	**51.5**	**65.7**	**70.3**	**106.6**	**127.3**

% change from previous year

	1998	1999	2000	2001	2002	2003	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	1441.7	-94.9	-100.0	-	606.6	219.6	264.1	42.7	-41.1	38.0
Life Sciences	110.5	8.0	-11.1	-5.7	194.2	46.9	55.5	-27.0	66.4	-11.6
Opto-Electronics	31.0	22.3	99.1	41.2	-86.2	-11.4	8.3	11.6	49.6	236.3
Computers and Telecommunications	82.7	-15.6	-41.4	38.2	-24.9	-3.7	-4.9	27.3	99.6	28.5
Electronics	6.7	-40.6	12.4	39.7	-63.6	-40.8	782.5	-87.8	154.8	-7.7
Computer Integrated Manufacturing	-39.6	51.9	33.4	-39.2	21.9	118.0	270.2	23.2	4.3	-22.8
Material Design	-	-	216.0	2663.1	-99.7	944.6	-66.8	184.4	429.6	-48.7
Aerospace	131.0	17.1	278.5	65.0	-11.6	-60.7	-41.0	123.7	-36.3	10.1
Weapons and Nuclear	1165.9	276.9	164.2	-86.4	136.8	-63.4	-34.0	-93.2	-66.9	659.7
Total	**75.4**	**-7.5**	**11.1**	**45.7**	**-33.7**	**-11.6**	**27.6**	**6.9**	**51.7**	**19.5**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 45. Imports of High Technology Goods from the European Union, by Commodity Group, 1997-2007

Value ($000,000)

	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	8.0	12.1	8.4	11.0	28.3	21.8	18.6	14.8	14.7	19.5	30.0
Life Sciences	71.2	78.2	92.9	110.7	132.4	138.1	143.3	130.6	137.1	149.9	145.4
Opto-Electronics	3.4	3.1	3.6	7.2	5.8	7.7	9.3	9.0	10.3	7.1	6.8
Computers and Telecommunications	69.6	85.3	116.7	169.1	90.2	99.9	96.0	108.0	90.5	95.2	97.3
Electronics	35.3	50.0	59.8	55.9	14.4	11.8	13.8	14.5	11.6	10.4	10.3
Computer Integrated Manufacturing	16.3	12.4	13.6	19.9	25.1	27.0	23.7	26.8	27.1	25.2	23.0
Material Design	1.3	2.6	4.4	9.8	11.1	2.1	2.5	2.2	1.8	1.8	2.9
Aerospace	292.9	244.8	349.8	232.4	546.6	447.6	182.5	110.7	80.3	99.7	96.4
Weapons and Nuclear	8.0	6.1	5.5	10.4	11.5	6.5	5.4	9.8	3.5	5.0	4.1
Total	**506.0**	**494.6**	**654.7**	**626.4**	**865.5**	**762.6**	**495.2**	**426.3**	**376.8**	**413.6**	**416.3**

% change from previous year

	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	51.1	-30.3	30.0	158.1	-22.9	-14.8	-20.6	-0.4	32.8	53.9
Life Sciences	9.8	18.8	19.1	19.7	4.3	3.7	-8.9	5.0	9.3	-3.0
Opto-Electronics	-9.7	16.6	102.1	-19.2	32.2	21.2	-3.6	14.2	-31.2	-3.4
Computers and Telecommunications	22.5	36.9	45.0	-46.7	10.7	-3.9	12.5	-16.2	5.2	2.2
Electronics	41.6	19.6	-6.6	-74.2	-17.9	16.3	5.0	-19.7	-10.5	-1.0
Computer Integrated Manufacturing	-24.1	9.3	46.7	26.3	7.3	-12.0	13.1	1.2	-7.0	-9.0
Material Design	110.7	66.2	123.4	13.0	-80.8	17.2	-12.3	-18.4	-2.1	67.5
Aerospace	-16.4	42.9	-33.6	135.2	-18.1	-59.2	-39.4	-27.4	24.1	-3.3
Weapons and Nuclear	-24.0	-9.4	88.5	10.7	-43.6	-16.2	80.6	-64.7	42.5	-16.6
Total	**-2.3**	**32.4**	**-4.3**	**38.2**	**-11.9**	**-35.1**	**-13.9**	**-11.6**	**9.8**	**0.6**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 46. Balance of Trade in High Technology Goods with the European Union, by Commodity Group, 1997-2007

Balance ($000,000)

	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Biotechnology	-7.9	-10.8	-8.4	-11.0	-28.3	-21.7	-18.3	-13.8	-13.3	-18.7	-28.9
Life Sciences	-69.0	-73.7	-88.0	-106.3	-128.4	-126.1	-125.9	-103.5	-115.1	-116.7	-115.7
Opto-Electronics	2.2	4.0	5.1	10.3	18.9	-4.3	-6.0	-5.5	-6.5	-1.2	11.4
Computers and Telecommunications	-45.3	-42.8	-78.9	-141.3	-58.3	-75.5	-70.5	-83.5	-55.5	-39.5	-24.7
Electronics	-28.6	-43.0	-46.7	-20.9	5.2	-4.3	8.2	18.6	25.0	44.1	6.4
Computer Integrated Manufacturing	-15.2	-11.7	-12.5	-18.4	-24.2	-25.9	-21.3	-18.0	-15.5	-9.8	-14.0
Material Design	-1.3	-2.6	-4.3	-9.6	-4.3	-2.1	-2.2	-2.0	-1.0	-0.6	-1.8
Aerospace	-290.7	-240.2	-343.9	-210.0	-516.6	-415.4	-167.5	-99.3	-57.6	-70.3	-77.1
Weapons and Nuclear	-7.9	-5.7	-4.3	-7.6	-11.1	-5.6	-4.7	-9.6	-3.0	-4.5	-3.5
Total	**-463.6**	**-426.5**	**-581.9**	**-514.7**	**-747.0**	**-680.9**	**-408.3**	**-316.6**	**-242.3**	**-217.1**	**-247.9**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

[r] Revised
[p] Preliminary

Source: BC Stats

Table 47. Exports of High Technology Services, 1997-2007

BRITISH COLUMBIA
Value ($ millions)

	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Software Publishers	114	332	318	280	549	474	548	781	888	957	1,089
Other Computer and Related Services	123	124	368	627	408	348	445	415	492	548	559
Motion Picture Production & Post-Production	17	47	243	196	182	260	388	242	415	397	224
Telecommunications and Related	205	221	199	169	152	178	182	147	160	160	184
Engineering Services	443	222	169	103	137	112	216	211	212	258	285
Other Services	53	61	56	73	85	219	193	236	251	293	312
Total	**956**	**1,007**	**1,353**	**1,447**	**1,513**	**1,591**	**1,972**	**2,032**	**2,418**	**2,613**	**2,652**

% change from previous year

	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Software Publishers	191.2	-4.1	-12.1	96.2	-13.6	15.6	42.5	13.7	7.7	13.8
Other Computer and Related Services	0.8	196.3	70.2	-34.9	-14.6	27.8	-6.9	18.7	11.5	1.9
Motion Picture Production & Post-Production	172.9	415.8	-19.3	-7.4	43.3	48.9	-37.7	71.8	-4.3	-43.6
Telecommunications and Related	7.7	-10.0	-15.3	-9.6	16.6	2.2	-19.0	8.7	-0.1	15.2
Engineering Services	-50.0	-23.9	-39.0	33.0	-18.2	93.6	-2.4	0.4	21.5	10.7
Other Services	14.2	-8.6	30.8	17.5	156.7	-12.0	22.5	6.3	16.9	6.3
Total	**5.3**	**34.4**	**6.9**	**4.6**	**5.2**	**23.9**	**3.0**	**19.0**	**8.1**	**1.5**

CANADA
Value ($ millions)

	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Software Publishers	1,241	1,158	2,425	2,365	2,573	2,377	2,640	2,671	2,667	2,582	2,883
Other Computer and Related Services	1,434	1,826	2,303	3,104	3,028	2,697	2,089	2,249	2,697	2,600	2,676
Motion Picture Production & Post-Production	708	795	1,076	981	1,084	1,116	1,034	1,212	1,285	1,217	1,223
Telecommunications and Related	1,352	1,494	1,398	1,219	1,444	1,473	1,463	1,619	1,659	1,811	1,859
Engineering Services	1,394	1,384	1,104	950	1,076	1,304	1,458	1,822	2,055	2,117	2,221
Other Services	299	368	347	414	578	1,363	1,236	1,144	1,182	1,379	1,452
Total	**6,428**	**7,025**	**8,653**	**9,033**	**9,783**	**10,331**	**9,919**	**10,716**	**11,546**	**11,706**	**12,315**

% change from previous year

	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
Software Publishers	-6.7	109.4	-2.5	8.8	-7.6	11.0	1.2	-0.2	-3.2	11.7
Other Computer and Related Services	27.3	26.1	34.8	-2.5	-10.9	-22.6	7.7	20.0	-3.6	2.9
Motion Picture Production & Post-Production	12.2	35.4	-8.8	10.5	3.0	-7.4	17.2	6.1	-5.3	0.5
Telecommunications and Related	10.5	-6.4	-12.8	18.5	2.0	-0.7	10.7	2.5	9.1	2.7
Engineering Services	-0.7	-20.2	-14.0	13.2	21.2	11.8	25.0	12.8	3.0	4.9
Other Services	23.1	-5.7	19.3	39.6	136.0	-9.4	-7.4	3.3	16.6	5.3
Total	**9.3**	**23.2**	**4.4**	**8.3**	**5.6**	**-4.0**	**8.0**	**7.7**	**1.4**	**5.2**

[r] Revised
[p] Preliminary

Source: BC Stats and Statistics Canada

Table 48. Domestic Exports of High Technology Goods by Province, 1997-2007

Value ($ millions)

	1997	1998	1999	2000	2001	2002	2002	2004[r]	2005[r]	2006[r]	2007[p]
British Columbia	581.4	769.2	840.1	923.1	748.1	684.6	635.2	686.6	705.1	857.0	877.1
Alberta	1,238.4	1,540.9	1,915.6	4,375.7	2,439.0	1,889.6	1,181.6	1,131.6	1,023.6	1,224.2	1,008.2
Ontario	10,899.2	11,782.7	12,338.3	15,186.1	13,512.8	10,282.4	8,430.0	9,379.0	10,911.9	11,453.8	11,391.0
Quebec	9,801.7	11,860.1	13,835.2	20,677.2	16,948.2	14,496.9	14,269.4	13,217.6	13,605.7	12,481.1	13,112.0
Canada	**23,229.3**	**26,829.2**	**29,854.5**	**42,221.3**	**34,594.9**	**28,012.8**	**25,163.3**	**24,962.1**	**26,876.7**	**26,796.5**	**27,303.8**

% change from previous year

	1998	1999	2000	2001	2002	2002	2004[r]	2005[r]	2006[r]	2007[p]
British Columbia	32.3	9.2	9.9	-19.0	-8.5	-7.2	8.1	2.7	21.5	2.4
Alberta	24.4	24.3	128.4	-44.3	-22.5	-37.5	-4.2	-9.5	19.6	-17.6
Ontario	8.1	4.7	23.1	-11.0	-23.9	-18.0	11.3	16.3	5.0	-0.5
Quebec	21.0	16.7	49.5	-18.0	-14.5	-1.6	-7.4	2.9	-8.3	5.1
Canada	**15.5**	**11.3**	**41.4**	**-18.1**	**-19.0**	**-10.2**	**-0.8**	**7.7**	**-0.3**	**1.9**

High Technology Share of Total Domestic Exports (%)

	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
British Columbia	2.2	3.0	2.9	2.7	2.4	2.4	2.2	2.2	2.1	2.6	2.8
Alberta	3.7	5.0	5.5	7.9	4.3	3.9	2.1	1.8	1.3	1.6	1.2
Ontario	7.8	7.6	7.0	8.2	7.6	5.7	5.0	5.2	6.1	6.5	6.4
Quebec	19.5	21.4	23.2	29.0	24.9	22.1	23.4	20.5	20.3	18.1	19.5
Canada	8.3	9.0	9.0	10.9	9.2	7.7	7.1	6.5	6.6	6.5	6.5

Note that high technology exports for Canada, Alberta, Ontario and Quebec are based on high tech definitions developed for British Columbia. If these definitions were derived specifically for any of those regions, they might differ slightly.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 49. Imports of High Technology Goods, Canada and BC, 1997-2007

Value ($ millions)

	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
British Columbia	3,623.2	3,930.3	4,396.6	4,702.9	4,281.3	4,045.1	3,750.2	3,925.5	4,119.5	4,227.0	4,682.2
Canada	**39,832.4**	**42,263.2**	**47,970.8**	**57,135.2**	**49,910.3**	**43,905.2**	**40,481.2**	**43,655.8**	**45,892.1**	**46,539.3**	**50,268.6**

% change from previous year

	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[r]	2007[p]
British Columbia	8.5	11.9	7.0	-9.0	-5.5	-7.3	4.7	4.9	2.6	10.8
Canada	**6.1**	**13.5**	**19.1**	**-12.6**	**-12.0**	**-7.8**	**7.8**	**5.1**	**1.4**	**8.0**

Note that high technology imports for Canada are based on high tech definitions developed for British Columbia.
If these definitions were derived specifically for any of those regions, they might differ slightly.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 50. United States High Technology Commodity Trade, 1997-2007

Value ($US millions)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Domestic Exports	157,958.2	168,296.1	178,519.9	197,109.5	172,412.2	153,273.5	151,535.4	166,441.8	177,599.6	209,052.1	226,818.8
Re-Exports	19,637.3	18,256.3	21,488.0	30,051.5	27,694.6	25,353.8	28,251.2	35,012.2	38,006.1	43,517.1	46,624.7
Imports	145,055.5	156,528.2	180,646.3	222,146.4	195,265.2	196,100.1	207,195.8	238,478.3	259,968.7	290,848.0	326,928.8
Balance of Trade	**32,539.9**	**30,024.2**	**19,361.5**	**5,014.6**	**4,841.5**	**-17,472.8**	**-27,409.3**	**-37,024.2**	**-44,363.0**	**-38,278.8**	**-53,485.2**

% change from previous year

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Domestic Exports	6.5	6.1	10.4	-12.5	-11.1	-1.1	9.8	6.7	17.7	8.5
Re-Exports	-7.0	17.7	39.9	-7.8	-8.5	11.4	23.9	8.6	14.5	7.1
Imports	7.9	15.4	23.0	-12.1	0.4	5.7	15.1	9.0	11.9	12.4
Balance of Trade	**-7.7**	**-35.5**	**-74.1**	**-3.5**	**-460.9**	**56.9**	**35.1**	**19.8**	**-13.7**	**39.7**

Source: US Department of Commerce

Table 51. High Technology Trade Comparison: United States vs. Canada and BC (in Canadian $), 1997-2007

Value ($Cdn millions)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Domestic Exports											
United States*	218,708.6	249,668.2	265,227.9	292,785.2	267,038.9	240,691.9	212,303.3	216,587.8	215,145.1	237,137.2	243,613.8
British Columbia	581.4	769.2	840.1	923.1	748.1	684.6	635.2	686.6	705.1	857.0	877.1
Canada	23,229.3	26,829.2	29,854.5	42,221.3	34,594.9	28,012.8	25,163.3	24,962.1	26,876.7	26,796.5	27,303.8
Imports											
United States*	200,843.6	232,210.4	268,387.2	329,975.0	302,434.6	307,944.4	290,284.5	310,327.5	314,927.4	329,922.0	351,136.5
British Columbia	3,623.2	3,930.3	4,396.6	4,702.9	4,281.3	4,045.1	3,750.2	3,925.5	4,119.5	4,227.0	4,682.2
Canada	39,832.4	42,263.2	47,970.8	57,135.2	49,910.3	43,905.2	40,481.2	43,655.8	45,892.1	46,539.3	50,268.6

% change from previous year

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Domestic Exports										
United States*	14.2	6.2	10.4	-8.8	-9.9	-11.8	2.0	-0.7	10.2	2.7
British Columbia	32.3	9.2	9.9	-19.0	-8.5	-7.2	8.1	2.7	21.5	2.4
Canada	15.5	11.3	41.4	-18.1	-19.0	-10.2	-0.8	7.7	-0.3	1.9
Imports										
United States*	15.6	15.6	22.9	-8.3	1.8	-5.7	6.9	1.5	4.8	6.4
British Columbia	8.5	11.9	7.0	-9.0	-5.5	-7.3	4.7	4.9	2.6	10.8
Canada	6.1	13.5	19.1	-12.6	-12.0	-7.8	7.8	5.1	1.4	8.0

* Converted from US dollars using an average annual exchange rate

Source: BC Stats and US Department of Commerce

Table 52. United States Domestic Exports of High Technology Goods, by Commodity Group, 1997-2007

Value ($US millions)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Biotechnology	1,468.1	1,455.6	1,578.5	1,715.5	1,594.7	2,115.5	2,844.2	3,714.2	4,553.5	5,120.2	7,467.2
Life Sciences	9,593.7	9,970.4	10,491.6	11,413.6	12,124.0	11,116.2	12,026.6	13,218.3	15,042.4	17,121.3	19,547.5
Opto-Electronics	1,630.1	1,735.7	1,988.0	3,814.6	3,091.7	2,179.7	2,121.9	3,055.2	3,838.2	4,303.3	4,768.3
Computers and Telecommunications	56,527.3	54,678.5	56,235.3	64,197.0	53,439.9	42,336.4	39,407.5	42,150.2	44,076.6	46,606.7	49,161.2
Electronics	29,785.7	29,986.4	37,581.7	45,927.8	34,035.5	32,449.7	36,371.9	35,944.7	34,912.0	38,648.8	36,279.0
Computer Integrated Manufacturing	7,731.5	6,901.9	8,423.9	13,754.5	8,787.2	7,997.3	7,651.5	12,302.4	11,092.3	13,810.3	13,623.6
Material Design	1,437.7	1,263.1	1,581.8	2,574.7	2,190.6	1,032.7	981.8	1,055.5	1,056.9	1,274.8	1,531.5
Aerospace	46,468.6	59,427.1	58,012.5	51,030.3	54,298.0	50,937.6	47,333.9	51,862.5	60,528.1	78,597.9	90,011.6
Weapons and Nuclear	3,315.3	2,877.4	2,626.6	2,681.4	2,850.6	3,108.4	2,796.1	3,138.8	2,499.8	3,568.9	4,428.8
Total	**157,958.2**	**168,296.1**	**178,519.9**	**197,109.5**	**172,412.2**	**153,273.5**	**151,535.4**	**166,441.8**	**177,599.6**	**209,052.1**	**226,818.8**

% change from previous year

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Biotechnology	-0.9	8.4	8.7	-7.0	32.7	34.4	30.6	22.6	12.4	45.8
Life Sciences	3.9	5.2	8.8	6.2	-8.3	8.2	9.9	13.8	13.8	14.2
Opto-Electronics	6.5	14.5	91.9	-19.0	-29.5	-2.7	44.0	25.6	12.1	10.8
Computers and Telecommunications	-3.3	2.8	14.2	-16.8	-20.8	-6.9	7.0	4.6	5.7	5.5
Electronics	0.7	25.3	22.2	-25.9	-4.7	12.1	-1.2	-2.9	10.7	-6.1
Computer Integrated Manufacturing	-10.7	22.1	63.3	-36.1	-9.0	-4.3	60.8	-9.8	24.5	-1.4
Material Design	-12.1	25.2	62.8	-14.9	-52.9	-4.9	7.5	0.1	20.6	20.1
Aerospace	27.9	-2.4	-12.0	6.4	-6.2	-7.1	9.6	16.7	29.9	14.5
Weapons and Nuclear	-13.2	-8.7	2.1	6.3	9.0	-10.0	12.3	-20.4	42.8	24.1
Total	**6.5**	**6.1**	**10.4**	**-12.5**	**-11.1**	**-1.1**	**9.8**	**6.7**	**17.7**	**8.5**

Source: US Department of Commerce

Table 53. United States Imports of High Technology Goods, by Commodity Group, 1997-2007

Value ($US millions)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Biotechnology	825.9	748.2	1,006.4	1,136.0	1,294.4	1,871.9	2,183.9	1,967.4	4,218.8	4,872.6	6,441.6
Life Sciences	9,614.6	12,425.9	15,085.1	16,210.5	20,113.0	25,950.3	30,936.9	32,799.0	30,390.3	33,736.6	36,236.0
Opto-Electronics	3,632.0	3,952.1	4,672.2	5,822.9	5,607.5	5,436.6	5,254.9	7,795.0	12,173.5	19,575.0	24,973.7
Computers and Telecommunications	68,227.8	74,874.8	89,327.0	111,180.2	95,158.6	100,765.9	110,088.5	132,539.0	147,188.5	160,836.8	179,710.6
Electronics	37,007.6	33,922.5	37,978.3	48,822.2	30,882.6	26,649.5	25,135.2	27,454.0	26,594.4	28,009.1	27,033.2
Computer Integrated Manufacturing	6,586.6	6,430.7	6,220.3	8,684.9	7,473.4	6,562.2	6,262.8	7,587.2	8,897.2	10,289.6	10,766.1
Material Design	1,232.8	1,137.2	1,618.8	2,707.4	2,435.9	1,484.9	1,510.5	1,794.4	1,803.8	2,170.8	2,383.7
Aerospace	17,106.1	21,984.0	23,256.9	25,733.1	30,511.0	25,212.9	22,773.1	23,832.8	25,531.4	27,584.3	33,851.3
Weapons and Nuclear	822.2	1,052.8	1,481.3	1,849.3	1,788.8	2,165.9	3,050.4	2,709.5	3,170.8	3,773.1	5,532.6
Total	**145,055.5**	**156,528.2**	**180,646.3**	**222,146.4**	**195,265.2**	**196,100.1**	**207,196.2**	**238,478.3**	**259,968.7**	**290,848.0**	**326,928.8**

% change from previous year

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Biotechnology	-9.4	34.5	12.9	13.9	44.6	16.7	-9.9	114.4	15.5	32.2
Life Sciences	29.2	21.4	7.5	24.1	29.0	19.2	6.0	-7.3	11.0	7.4
Opto-Electronics	8.8	18.2	24.6	-3.7	-3.0	-3.3	48.3	56.2	60.8	27.6
Computers and Telecommunications	9.7	19.3	24.5	-14.4	5.9	9.3	20.4	11.1	9.3	11.7
Electronics	-8.3	12.0	28.6	-36.7	-13.7	-5.7	9.2	-3.1	5.3	-3.5
Computer Integrated Manufacturing	-2.4	-3.3	39.6	-13.9	-12.2	-4.6	21.1	17.3	15.6	4.6
Material Design	-7.8	42.3	67.2	-10.0	-39.0	1.7	18.8	0.5	20.3	9.8
Aerospace	28.5	5.8	10.6	18.6	-17.4	-9.7	4.7	7.1	8.0	22.7
Weapons and Nuclear	28.0	40.7	24.8	-3.3	21.1	40.8	-11.2	17.0	19.0	46.6
Total	**7.9**	**15.4**	**23.0**	**-12.1**	**0.4**	**5.7**	**15.1**	**9.0**	**11.9**	**12.4**

Source: US Department of Commerce

Table 54. United States Balance of Trade in High Technology Goods, by Commodity Group, 1997-2007

Balance ($US millions)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Biotechnology	653.7	721.1	587.8	592.8	320.6	258.6	678.9	1,775.8	373.7	290.5	1,101.9
Life Sciences	424.9	-1,942.5	-4,067.4	-4,259.9	-7,273.4	-14,091.7	-17,934.8	-18,283.1	-13,896.4	-14,980.5	-14,652.8
Opto-Electronics	-1,834.0	-2,038.6	-2,478.3	-1,710.0	-2,204.8	-3,006.1	-2,787.9	-4,288.6	-7,536.7	-14,511.4	-19,506.4
Computers and Telecommunications	-4,390.8	-13,348.0	-24,843.0	-34,929.8	-29,898.2	-47,456.6	-56,960.7	-73,328.9	-83,180.2	-91,595.9	-104,913.2
Electronics	2,614.2	4,419.8	9,580.7	11,807.6	14,475.8	16,113.4	21,462.0	21,110.4	20,949.4	25,406.2	23,510.0
Computer Integrated Manufacturing	1,522.5	864.5	2,643.8	5,610.2	1,978.0	2,000.3	2,056.9	5,457.1	2,956.9	4,375.2	3,886.4
Material Design	229.1	153.0	5.2	-56.2	-126.3	-396.0	-474.0	-657.2	-648.8	-769.7	-718.0
Aerospace	30,709.2	39,142.0	36,722.5	27,014.4	26,405.7	28,042.3	26,659.8	30,544.5	37,206.3	53,632.3	58,823.2
Weapons and Nuclear	2,611.0	2,052.9	1,210.3	945.6	1,164.2	1,063.0	-109.8	645.7	-587.0	-125.3	-1,016.3
Total	**32,539.9**	**30,024.2**	**19,361.5**	**5,014.6**	**4,841.5**	**-17,472.8**	**-27,409.7**	**-37,024.2**	**-44,363.0**	**-38,278.8**	**-53,485.2**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within the United States only.

Source: US Department of Commerce

Appendix A: Defining the High Technology Sector

How was the sector definition arrived at?

In 1995, BC Stats and the Science and Technology Division of the Ministry of Employment and Investment developed a definition of the high technology sector that focused on standard industries that produce high technology goods and services as their ultimate outputs. The definition looked at the high tech outputs of various standard industries (industries defined in the Canadian Standard Industrial Classification—SIC), their level of research activity, their representation in existing lists of high tech companies, and the opinions of an expert panel drawn from government, university, and the private sector.[21] The SIC data series have since been discontinued and a new classification system, the North American Industry Classification System (NAICS), has been implemented.

The adoption of NAICS-based industry definitions made it necessary to revisit the definition on which the high-tech estimates were based, since many of the industry groupings previously used were no longer available. During 2001, in consultation with industry stakeholders, BC Stats developed a new definition of the high technology sector that was based on the NAICS industry categories. The process of developing the criteria for including or excluding specific industries in the definition was similar to that of the original SIC-based definition as commodity lists, research activities and company lists were once again examined. In addition, since an accepted SIC-based definition was already available, an SIC to NAICS concordance was used as a starting point.[22]

The definition originally chosen (based on theoretical considerations) proved to be only a starting point, as much of the information required to compile high technology statistics was not avail-

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[21] The complete methodology is presented in Lawrance, J. and Miller, S. *Defining the British Columbia High Technology/Knowledge Sector*. (1996). BC Stats, Ministry of Government Services, and Ministry of Employment and Investment, Government of British Columbia. This document is available on-line at:

http://www.bcstats.gov.bc.ca/data/bus_stat/busind/hi_tech/ht_def.pdf

[22] A more detailed discussion of the methodology is presented in Miller, S. and Adams, S. *Defining the British Columbia High Technology Sector Using NAICS*. (2001). BC Stats, Ministry of Management Services, Government of British Columbia. This document is available on-line at:

http://www.bcstats.gov.bc.ca/data/bus_stat/busind/hi_tech/NAICSdef.pdf

able at the required level of detail. A working definition, based on availability of data, was adopted in order to prepare the estimates presented in the *Profile* report.

In recent years, a more broadly-based view of high technology has evolved, which encompasses some industries not considered high tech just a few years ago, such as various communications technologies. In recognition of this, the definition was expanded in 2005 to include some of these industries. The new industries added to the existing definition were determined through a review of literature pertaining to high technology definitions in use elsewhere, particularly those from the American Electronics Association (whose definition has been widely used by institutions around the world) and Industry Canada.[23]

Are all high tech companies included?

It is recognized that there are some drawbacks to the industry-based definition employed here. The first is that the NAICS does not fully recognize industries of the "new economy." As a result, new products and services are often grouped in an industry that primarily produces similar but distinctly different products and services.

Second, it is difficult to capture the full breadth of high technology or knowledge-intensive activity in the economy through NAICS-based definitions. Innovation is not unique to a specific group of industries, but can be found throughout the whole economy. Some firms on the "leading edge" will be missed if they are classified in industries that, in aggregate, fail to show high tech characteristics. On the other hand, it is impossible to remove those firms that lag behind the industry norm from the industries in the sector.

The industries included in the definition adopted for this profile represent the core of the high technology sector. While it is certainly true that examples of creativity and innovation can be found in every industry, this definition, with its industry focus, includes only those industries where high technology activity is concentrated.

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[23] Platzer, M., Novak, C.A. and Kazmierczak, M.F. (February 2003). *Defining the High-Tech Industry*. American Electronics Association.

E. Wayne Clendenning & Associates (May 2000). *Comparison and Reconciliation of SIC and NAICS Industry Codes Used to Define Knowledge-Based Industries (KBIs)*. Industry Canada.

Exactly which industries are included?

The table below lists the industries that are defined, for the purpose of this report, to constitute the high technology sector.

Industries in the High Technology Sector

NAICS	Industry
Manufacturing Industries	
325189	Other Inorganic Chemicals
325410	Pharmaceutical and Medicine
333310	Commercial and Service Industry
334110	Computer and Peripheral
334210	Telephone Apparatus
334220	Radio, Television Broadcasting & Wireless Communications Equipment
334290	Other Communications Equipment
334310	Audio and Video Equipment
334410	Semiconductor and Other Electronic Components
334511	Navigational and Guidance Instruments
334512	Measuring, Medical and Controlling Devices
334610	Manufacturing and Reproducing Magnetic and Optical Media
335315	Switchgear and Switchboard, and Relay and Industrial Control Apparatus
335920	Communication and Energy Wire and Cable
335990	All Other Electrical Equipment and Component
336410	Aerospace Products and Parts
339110	Medical Equipment and Supplies
Service Industries	
511210	Software Publishers
512110	Motion Picture and Video Production
512190	Post-Production and Other Motion Picture and Video Industries
515210	Pay and Specialty Television
516110	Internet Publishing and Broadcasting
517110	Wired Telecommunications Carriers
517210	Wireless Telecommunications Carriers (Except Satellite)
517310	Telecommunications Resellers
517410	Satellite Telecommunications
517510	Cable and Other Program Distribution
517910	Other Telecommunications
518111	Internet Service Providers
518112	Web Search Portals
518210	Data Processing, Hosting and Related
541330	Engineering
541360	Geophysical Surveying and Mapping Services
541370	Surveying and Mapping (Except Geophysical) Services
541380	Testing Laboratories
541510	Computer Systems Design and Related
541620	Environmental Consulting
541690	Other Scientific and Technical Consulting
541710	Research and Development in Physical, Engineering and Life Sciences
541720	Research and Development in the Social Sciences and Humanities

Note: For the purposes of this report, the manufacturing NAICS industries are grouped together as "Manufacturing." For services, Engineering (541330) is reported as a separate industry. The other industries are aggregated into groups to maintain confidentiality requirements and still allow for some detailed reporting. Computer and Related Services includes 511210, 516110, the 518 NAICS codes and 541510. The remaining 541 NAICS codes are grouped into a category called "Other Services." The 517 NAICS codes and 515210 are covered under a single "Telecommunications and Related" classification and 512110 and 512190 are grouped under "Motion Picture Production and Post Production."

High Technology Industries

Manufacturing

325189 Other Inorganic Chemicals Comprises establishments engaged in the manufacture of high tech inorganic chemicals such as enriched uranium and radioactive isotopes.

325410 Pharmaceuticals and Medicine Consists of firms engaged in the manufacture of drugs, medicines and related products for human or animal use, including cutting edge products developed through considerable research efforts.

333310 Commercial and Service Industry Machinery Contains establishments that manufacture machinery for use in commercial and service industries, including high tech optical instruments and photographic equipment.

334110 Computers and Peripheral Equipment Comprises establishments primarily engaged in the manufacture of computers and peripheral computer equipment such as storage devices, CD-ROM and DVD drives, optical readers and scanners, etc.

334210 Telephone Apparatus Contains firms that manufacture wired telephone and data communications equipment, including cordless telephones, facsimile equipment, local area network (LAN) equipment, etc.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Consists of firms primarily engaged in manufacturing radio and television broadcast and wireless communication equipment, including satellites, GPS (global positioning system) and pagers.

334290 Other Communications Equipment Comprises establishments engaged in the manufacture of other types of communications equipment, such as traffic signals, fire detection and alarm systems, remote control units, intercom systems, etc.

334310 Audio and Visual Equipment Establishments engaged in manufacturing electronic audio and video equipment such as compact disc and DVD players, televisions, etc.

334410 Semiconductor and Other Electronic Components Consists of firms engaged in the manufacture of semiconductor devices and other electronic components such as circuit boards, microprocessor chips and other computer parts, fibre-optic connectors, etc.

*334511 **Navigational and Guidance Instruments*** Comprises establishments primarily engaged in navigational and guidance instruments such as air traffic control radar systems, sonar, etc.

*334512 **Measuring, Medical and Controlling Devices*** Establishments engaged mainly in the manufacturing equipment such as high tech medical devices, laboratory analytical and testing instruments, industrial process control instruments, etc.

*334610 **Manufacturing and Reproducing Magnetic and Optical Media*** Contains establishments primarily engaged in manufacturing magnetic and optical media such as compact discs, computer software, etc.

*335315 **Switchgear and Switchboard, and Relay and Industrial Control Apparatus*** Comprises establishments engaged in manufacturing electrical switchgear and protective equipment, including high tech switching devices.

*335920 **Communication and Energy Wire and Cable*** Consists of firms engaged in the manufacture of communications and energy wire and cable such as high tech fibre-optic cable.

*335990 **All Other Electrical Equipment and Components*** Comprises establishments engaged in manufacturing electrical equipment and components, including fuel cells.

*336410 **Aerospace Products and Parts*** Establishments engaged in manufacturing aircraft, missiles, space vehicles, etc.

*339110 **Medical Equipment and Supplies*** Contains firms that manufacture medical equipment and supplies including high tech laboratory and dental equipment.

Services

*511210 **Software Publishers*** Establishments engaged in producing and distributing computer software.

*512110 **Motion Picture and Video Production*** Comprises firms engaged in producing motion pictures, videos, television programs and commercials.

*512190 **Post-Production and Other Motion Picture and Video Industries*** Consists of establishments engaged in providing post-production services and services to the motion picture and video industries, including high tech special effects and animation.

*515210 **Pay and Specialty Television*** Establishments engaged in broadcasting television programs on specialty cable networks, pay television or satellite networks.

*516110 **Internet Publishing and Broadcasting*** Comprises firms primarily engaged in publishing and/or broadcasting content on the Internet.

*517110 **Wired Telecommunications Carriers*** Consists of establishments engaged in operating and maintaining network facilities for the transmission of voice, data, text, sound and video.

*517210 **Wireless Telecommunications Carriers (Except Satellite)*** Comprises establishments engaged in operating and maintaining switching and transmission facilities to provide direct communications via the airwaves.

*517310 **Telecommunications Resellers*** Establishments that resell telecommunications services purchased from operators of telecommunications networks.

*517410 **Satellite Telecommunications*** Contains firms engaged in operating and maintaining satellite telecommunications facilities.

*517510 **Cable and Other Program Distribution*** Establishments engaged in distributing television and radio programs via cable or satellite distribution systems.

*517910 **Other Telecommunications*** Comprises establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking and telemetry, and radar station operation.

*518111 **Internet Service Providers*** Establishments that provide Internet services such as access to the Internet, web hosting and consulting related to Internet connectivity.

*518112 **Web Search Portals*** Comprises establishments engaged in operating web search portals.

*518210 **Data Processing, Hosting and Related*** Consists of firms engaged in providing hosting or data processing services.

*541330 **Engineering*** Comprises establishments engaged in engineering activities in design, development and utilization of machines, instruments, systems, etc.

*541360 **Geophysical Surveying and Mapping Services*** Establishments engaged in gathering, interpreting and mapping geophysical data.

*541370 **Surveying and Mapping (Except Geophysical) Services*** Contains firms engaged in providing surveying and mapping services of the surface of the earth, including the sea floor.

*541380 **Testing Laboratories*** Consists of establishments engaged in providing physical, chemical and other analytical testing services.

*541510 **Computer Systems Design and Related*** Establishments that provide expertise in the field of information technologies through writing and supporting computer software, and computer systems design and maintenance.

*541620 **Environmental Consulting*** Comprises establishments primarily engaged in providing consulting services on environmental issues using a staff of scientists, engineers and other technicians.

*541690 **Other Scientific and Technical Consulting*** Consists of firms engaged in providing advice and assistance on scientific and technical issues (other than environmental issues).

*541710 and 541720 **Scientific Research and Development*** Establishments engaged in research and experimental development in areas such as biotechnology, computers, physics, mathematics, etc.

Note that these NAICS codes are based on the 2002 NAICS definition. This NAICS definition has been supplanted by an updated 2007 classification system with changes to some industry groupings, including a few in the high technology sector. The 2007 NAICS has already been applied to the data from Statistics Canada's *Business Register*, which is the source for counts of establishments. The industries affected are primarily related to Internet technologies. NAICS 517110 has been expanded to include a portion of 518111 and has been recoded to 517111 *Wired Telecommunications Carriers (except Cable)*. NAICS 517510 has been expanded to include another portion of 518111 and has been recoded to 517112 *Cable and Other Program Distribution*. The remainder of 518111 has been grouped with 517310 and 517910 to form a redefined 517910 *Other Telecommunications*. Additionally, NAICS 516110 and 518112 have been grouped together into a new category, 519130 *Internet Publishing and Broadcasting and Web Search Portals*.

Unfortunately, the change to 518111 has resulted in the move of Internet service providers from the defined group "Computer and related services" to "Telecommunications" and has caused a small break in the data for establishments by industry. It also means that the industry groupings for the establishment counts are slightly different than those for employment, GDP, wages and revenue, since these data are still based on the 2002 NAICS. An attempt to regroup the data based on 2002 NAICS into categories consistent with the new NAICS scheme would likely result in confidentiality concerns that would force us to suppress all historical data for those industry groups. As such, in order to provide as much detail as possible, the industry groupings for the data based on 2002 NAICS have been preserved. At some point in the next couple of years, Statistics Canada will convert its other data sources to the revised NAICS classification and at that time, there will likely be a small break in the other economic variables presented in this report, just as there is with establishment counts in this edition.

Appendix B: Defining High Technology Commodities

Defining high technology commodities

Developing a definitive list of what commodities should be considered high technology is a difficult exercise. Leading technologies are continually evolving and what is considered high technology today may be classified as low tech tomorrow. As a result, the definition of high technology commodities must necessarily change over time. This means that data regarding high technology trade from 1997 may contain commodities that are no longer included in the 2007 definition. However, this does not mean that this data cannot be compared over time. It is still valid to look at growth rates over that period as long as it is clear that the rates represent growth in the changing definition of high technology, rather than a static basket of goods.[24]

The commodity list used by BC Stats to define high technology goods is based on the US Bureau of the Census' advanced technology products (ATP) list.[25] The list of American commodity codes was matched against the equivalent Canadian codes. In many cases the codes matched exactly and no further effort needed to be expended. However, in other cases there was not an exact match, particularly for exports, which are coded to only eight digits. For these commodity groups, further analysis was undertaken using available data from the US Bureau of the Census and Statistics Canada to determine whether or not the majority of these codes were high technology (as defined by the ATP list). If it was judged that this was not the case, the commodity was excluded from the high tech definition. While this may result in some high technology products being excluded from the definition, it should be balanced to some extent by those commodity classifications that, although they are

[24] One technical limitation that may cause difficulty in temporal comparisons is when there are changes to the definition of Harmonized System codes. When this occurs, there may be a resulting unintended change to the high technology commodity definition. This is due to the fact that the code may now include or exclude commodities that it did not previously, such that these goods can no longer be separated out (or perhaps can be more finely defined, so that low technology commodities that previously had to be included can now be expunged from the definition). However, these changes are usually small and should not have a significant impact on the data.

[25] For a discussion of the development and content of this list, see: McGuckin, R. H., Abbott, T. A., Herrick, P. and Norfolk, L. (1991). *Measuring Advanced-Technology Products Trade: A New Approach.* US Bureau of the Census.

mainly high technology, still include some "low tech" goods. Since the ATP list itself is defined using classification codes, this kind of trade-off is already present in the definition. No exact measure of high technology trade is possible to achieve since high technology is subjective to begin with, but this definition should be in line with what most people would agree is high technology.

Note that a commodity need not be produced by one of the industries included in the industry-based high technology definition in order to be considered a high technology product. Some industries not included in the high tech definition, because they mainly manufacture low technology goods, may also manufacture some high technology products. Conversely, it is possible for those industries classified as high technology to also manufacture some products that are considered low tech.

Calculating BC consumed imports

At this time, Statistics Canada does not produce data on imports by province of consumption, rather, only by province of clearance. An estimate of BC consumed imports was derived using the consumption of Canadian imports of those commodities by the BC economy and applying this ratio to total Canadian imports.

Data source

Data for trade in goods are supplied by Statistics Canada and the United States Bureau of the Census and are provided through the Trade Research and Inquiry Package (TRIP) computer reporting system at BC Stats. TRIP offers user-defined tabulations of export or import statistics for British Columbia, Canada, the United States and other countries. Tabulations can include information on commodities, countries, US states, years, months, mode of transport, etc.

Commodity groups

The US Bureau of the Census has defined ten fields involving advanced or high technology commodities. Each field represents a large number of products and processes that are considered to be on the leading edge. These fields have been used to classify exports and imports in this report.

Aerospace Technological developments in this field include advances that allow planes to fly further, faster, higher, to use less fuel and to have quieter engines. Many of the advances have been adapted to military applications, such as vertical take-off aircraft and aircraft that require shorter distances for takeoff and landings.

Biotechnology Biotechnology covers recent developments in recombinant deoxyribonucleic acid (DNA) research and genetic engineering. Obvious examples include drugs, enzymes and other therapeutic items. Common applications include agricultural production and the use of microorganisms for the production of drugs and other complex molecules.

Computer and Telecommunications This field covers technological advances affecting both computers and telecommunications hardware products. The primary advances in this field are in developing hardware that can process information more quickly. Important breakthroughs are expected in the areas of artificial intelligence and parallel processing.

Computer Integrated Manufacturing This field includes developments in robotics and numerically controlled (NC) machines. These products have a significant impact on industrial automation. Robots and NC machines perform increasingly sophisticated operations through developments in sensory and visual capabilities of machines. With these breakthroughs, the manufacturing processes have increased in flexibility and require less human intervention to operate and maintain production machinery. Many of the new automation technologies are made possible because of breakthroughs in the application and development of faster, smaller components.

Electronics The miniaturization of electronic components is the most important recent technological advance in the field of electronics. Some technologies included are integrated circuits, semiconductors, such as transistors and diodes, as well as new developments in surface mounting of electronic components such as capacitors and resistors.

Life Sciences (Medical) This field encompasses the application of scientific advances to medical sciences. Recent advances such as nuclear resonance imaging, echo cardiographs and total-patient monitoring systems are examples of products developed from recent technological advances in this field. Also, recent increases in the strength of materials and reductions in their weight have led to improved internally implemented fixation devices and prostheses.

Materials Design Materials design includes the newest methods of production for products that already exist in the market as well as the development of new products. Recent examples of technological advancements include high temperature superconductors, advanced polymers that expand the areas of plastic use and new ultra

clear glass that allows fibre-optic cable to be used for long distance communication.

Nuclear Technology This field covers developments in nuclear power production and primary nuclear reactors. It includes newly designed reactor components that improve the safety and efficiency of nuclear power plants. It also includes developments in the creation and packaging of nuclear fuel, the application of atomic physics to medical and other areas of science.

Opto-Electronics Opto-electronics is generally defined as the expanded development and application of the laser. Also included are recent advances in photoelectric cells and diodes, photographic and other imaging equipment, and fibre-optic cables.

Weapons This field covers all advanced methods used for the development, guidance, and control of weapons intended for national or personal protection and deterrence. Many of the developments in this area are the result of breakthroughs in computers and telecommunications as well as aerospace technologies.